$3.00

Current Notes

Vol. 7 No. 9 November 1987

In this issue:

Latest ATARI News
The Real Force Behind the Magic Sac
Atari in Berlin
Murphy's Law and the Translator
Atari and its Competitors

Product Reviews:

221B Baker Street
Athena II C.A.D.
Dr. T's Copyist
DBASIC
Easel/ST
Phasar
GFA Draft
Jupiter Probe
Pro Sprite Designer
Solapak
Sparta DOS Tool Kit
ST Sprite Factory
ST Writer 2.0
Sub Battle Simulator
Tune Up!
Zoomracks II

ATARI®

Your Monitor on the World of Atari

CN 709

Refresh Your Memory

And Keep Your Cool.

Introducing the ST Hard Drive System from ICD that refreshes your memory better than any other ST hard drive around. *No problem.*

It's the drive that not only looks cool, but stays cool too. All because of a built-in fan that knows exactly how to beat the heat and maintain a calm, cool and collected environment . . . even in *your* most heated situations. *No sweat.*

And, it's the hard drive that takes a refreshing approach to aesthetic case design as well. See for yourself. It's easy on the space, fitting perfectly under the monitor. And it's easy on the eyes, tailored to look great in the company of your Atari ST. With adjustable front legs, your monitor gets the lift it needs for comfortable viewing. *No strain.*

Despite a sleek and compact exterior, the ICD ST Hard Drive System is packed full of overwhelming enhancements. Like an internal clock that tags each file with up-to-the-minute time and date information. Not to mention expansion capabilities that welcome the connection of up to six SCSI devices and daisy-chaining Atari's DMA Bus (ACSI). It's available in more memory capacities than you can imagine. With storage ranging from 20 megabyte systems up to 280 megabytes. And, there's dual drives too, that double your protection and double your confidence. *No stress.*

So, the next time you think about a hard drive for your Atari ST, think about the countless ways we can refresh your memory. It's the only drive worth remembering. Because it's from ICD. *No wonder.*

For further product information, please call or write for our catalog today.

ICD

1220 Rock Street
Rockford, IL 61101-1437
(815)968-2228
MODEM: (815)968-2229
FAX: (815)968-6888

Atari ST is a trademark of Atari Corporation.

CURRENT NOTES (ISSN 8750-1937) is published monthly (excluding Jan. and Aug.) by Current Notes, Inc., 122 N. Johnson Rd, Sterling, VA 22170. (703) 450-4761. Subscriptions are $20 per year. Second-Class postage paid at Sterling, VA 22170.

POSTMASTER: Send address changes to:
Current Notes, Inc.
122 N. Johnson Rd,
Sterling, VA 22170.

Opinions expressed in this publication are those of the individual authors and do not necessarily represent or reflect the opinions of Current Notes or the user groups, none of which are affiliated in any way with Atari.

Advertising Rates:
Single Insertion:
Quarter Page: ($40),
Half Page ($70),
Full Page ($125).
Half-Year (5 issues) Rates:
Quarter Page ($160),
Half Page ($280),
Full Page ($500).
All ads must be paid in advance. Send photo-ready copy, by the 15th of the month preceding publication, to the address above. CN circ approx. 3,800.

ST Ed: Frank Sommers, 4624 Langdrum Lane, Chevy Chase, MD 20815 (301) 656-0719.
XE Ed: Jack Holtzhauer, 15817 Vista Dr, Dumfries, VA 22026 (703) 670-6475.
Submissions of articles or review copies of products should be sent directly to the appropriate editor. Deadline date for articles is the 10th of the month.

Back Issues: A limited no. of back issues are available: 1985 ($1) Jul, Sep, Oct, Nov, Dec; 1986 ($1.50) Feb, Apr, May, Jun, Jul, Sep, Oct, Nov, Dec; 1987 ($2) Apr, May, Jun, Jul, Oct, Nov.

TABLE OF CONTENTS

November 1987 Vol. 7, No. 9

Special Features

ST Update. All the latest Atari Developments: Atari At War, Hardware and Exotica, New Software, *by Frank Sommers*, 4
IT'S A SMALL WORLD. The REAL Force Behind the Magic Sac, *by David Small,* 10
ATARI IN BERLIN. A first hand report on Atari in Germany, *by Milt Creighton*, 14
TIPS'N'TRAPS. Hitchhiker's Guide, Lurking Hooror, and more, *by Jim Stevenson*, 20
PIECES OF EIGHT. The Reluctant Users, *by Len Paggiali,* 24
RAMDISKS FOR YOUR 320 XE. *by Alan Friedman*, 25
ADVENTURES IN THE MAGIC SACDOM. Murphy's Law and the Translator, *by Jeff Greenblatt*, 28
MUSIC, MIDI, and YOU. A Look at Dr. T's Copyist 1.4, *by Brant Slawson*, 32
ATARI SCUTTLEBITS. Atari and It's Competitors, *by Bob Kelly*, 39
RELAX AND ENJOY. Something Old, Something New, Maybe Something in IBM Blue, *by Joe Kuffner*, 42

Product Reviews

DBASIC FOR THE ST. Does the "D" Stand for "Dinosaur?", *by Stephen Eitelman, 16*
PD GEMS FOR THE 8-BIT. Textpro 1.1, Graphics Programs, Pascal Sampler, *by Alan Friedman*, 22
SPARTADOS TOOL KIT, Eight utilities for the SpartaDos User, *by Richard Gunter*, 26
GFA DRAFT. A Two-Dimensional CADD Program, *by Mike Gibbons*, 38
ST WRITER 2.0. A GEM Version At Last!, *by Milt Creighton*, 40
221B BAKER STREET. The Case of Holmes On the ST, *by Bill Moes*, 44
SUB BATTLE SIMULATOR. 20,000 Bytes Under the Sea, *by Roger Abram*, 46
ZOOMRACKS II. A Welcome Upgrade, *by Tom Richardson*, 48
SOLAPAK. RAM Disk, Print Spooler, Screen Saver, and Auto Loader, *by Stephen Eitelman*, 52
ATHENA II C.A.D. A Two-Dimensional Design Package for Computer Aided Design, *by Robert L. Fernandez*, 54
TUNEUP! A Hard Disk Optimizer, *by Jeff Greenblat*, 56
EASEL/ST. A Fun Utility, *by Kirk Osterman*, 58
SPRITES ON THE ST. Pro Sprite Designer and ST Sprite Factory, *by Bill Moes*, 60
WHERE DOES ALL YOUR MONEY GO? Find Out with PHASAR, *by John Barnes*, 64

Club and Library Info

WAACE Club News, 72
CN Registered Clubs, 74
New Subscribers, 74
Novatari XL/XE Library, 22
Current Notes ST Library, 68-71

ST UPDATE

By Frank Sommers

LATEST ATARI DEVELOPMENTS

ATARI AT WAR

Dealers, Developers, Customers -- The great prophet of excellence in corporations, Tom Peters, who by writing two books and burning up the management lecture circuit made himself into multimillion-dollar industry, The Tom Peters Group, hammered away at three themes for companies seeking to excel. Stay close to your customer, know what he wants and when he wants it, and then give it to him. To do that insure hands on management of people producing the product and also those who move it to the buyer. Lack of action in the latter two will prevent you from succeeding in the first one, i.e excelling in customer contacts.

Atari by now must be aware that the natives, their loyal customers, are restless. The distributors, some of whom who have already been "pushed out the window", have relinquished command of the Mega's to the "representatives". The dealers? Many of them don't even know if they will be selling the Mega's. The only locale where they had been released to dealers for sale by mid-October was California where Atari made the decision to test market the first shipment from Taiwan of 100. (As of mid-October only one had been sold by a lone dealer at the Home Computing Show.) Finally, the last week of October Mega's began shipping country-wide.

Jack Tramiel, now occupied with many problems beside the Mega, e.g. Atari in Europe and Atari and Federated Stores, and maybe even with retirement, has authored not only Atari's success but has set the tone for its attitude toward the troika: the customer, the developer, and the dealer. Recognizably a unique figure in the personal computer world, who is skilled at making deals which raise his margins and lower yours, he is also described as a quick lip with catchy slogans like "Business is War". Voices around the country are beginning to question where the war actually is. A report in October ST APPLICATIONS, "The Squeaky Wheel, Pt II", is a cogent condensation of the higher decibel complaints, asking, "Whom is the war against?"

Tour of the U.S. -- A cross-country glimpse suggests that the sun is rising in reverse orbit. The west coast now has its Mega ST's, per above, dealers are talking with their "reps", and are beginning to find out who is "qualified", and who is not, to be an Atari "upscale" dealer. They hear that the laser printer is about to follow the Mega's, and the sun would be their back, if only the Mega's would start to sell.

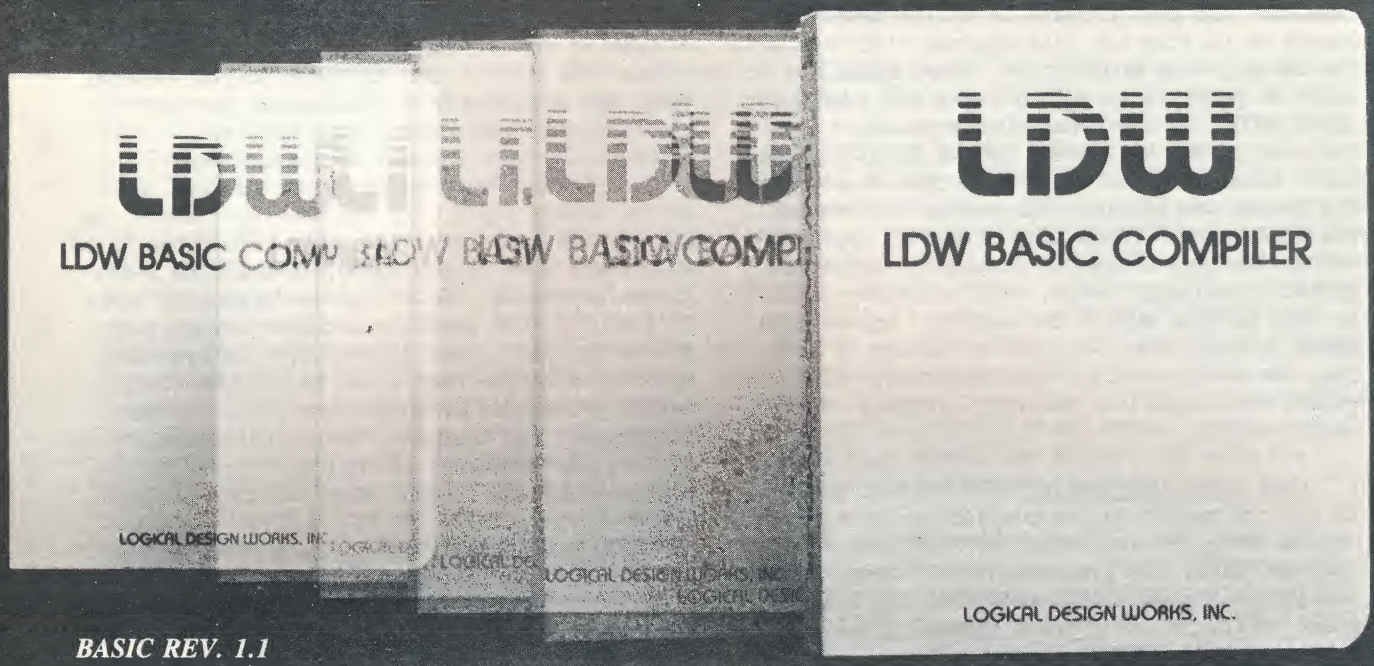
The mid-west is expectant with hopes that the new day is dawning. They are informed by their "rep" that orders, a minimum of $15,000 for the first (with a $7,500 requirement for re-orders), for Mega's should include a check to ITT and then go straight to the new Mega Division at Atari. But, be certain to add an order for an Atari hard drive with each request. The Mega is here and there, "the rep demo model", which is being moved around from dealer to dealer, was seen being demonstrated but not yet for purchase.

The mid-Atlantic east is still in the dark. No "reps" have contacted any of the dealers. No one knows who is "certified". No machines had showed up, but hopes for a rep demo unit of the Mega ST4 were expressed by at least one dealer for the end of October. Word that initial orders would be pegged between $15-20,000 were still viewed as rumours(the $15,000 figure is firm, if Atari has not relented by the time you see this.) When asked if they were subsisting without problems on 1040 and 520 sales, they replied not until recently. From September to October, with few exceptions, the supply of these machines had dried up. The distributors had none available. A check showed this had occurred across the country, but like the sun line, a month earlier in the mid-west, and several weeks before that in the far west. Canada reported no color monitors available in the later part of September. Now that the supply had begun again, the new policy was that machines would only be shipped on Fridays, and that the minimal order must be 12 machines in any combination of 520's and 1040's.

Dealers -- Part of the confusion may be the three VP's for U.S. marketing that Atari has had since the end of last winter. Jerry Brown was barely gone, having succeeded in getting Atari ST's into the music stores and announcing that no products would be shown until they were ready for sale, before Walter Wilson appeared and disappeared, reportedly underwhelmed by Atari's style of doing business. And then there is Augie Ligouri, formerly Atari's money man, now acting without official marketing portfolio, but who told the dealers at the Atari Fest in Worcester in a marketing seminar about the new price of the color Mega ST4, at $2799. (Part of the early

(Continued on Page 6)

FAST JUST GOT FASTER...



AND EASIER.

LDW BASIC is a powerful, integrated programming tool that lets you edit, compile, and execute your BASIC programs without exiting to the desktop. It also creates a program file which can be executed directly from the desktop. You will never have to load the BASIC language interpreter or run-time module to execute your program.

LDW BASIC Rev. 2.0 is very easy to use, yet it's more powerful than any other development system for the Atari ST. It supports a full set of high level GEM access statements and functions which let you:

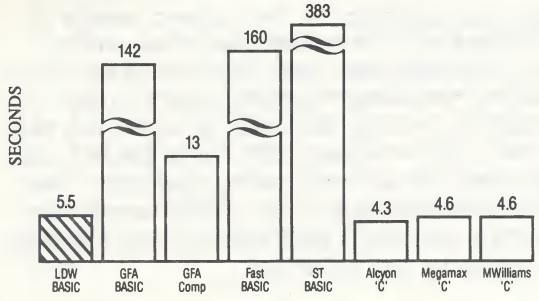
- Create and use your own windows, menus, dialog boxes, buttons, edit fields and check boxes.
- Use desk accessories while running your BASIC program.
- Design your own mouse pointer shapes and icons.
- Trap GEM events.

You get all this and much more. No more PEEKs/POKEs to access GEM. Among the supported statements are: ACTIVEW, ALERT, ASK FILE, ASK MOUSE, BOX, BUTTON, DIALOG, DRAW ICON, EDIT FIELD, EVENT, INFOW, MENU, MOUSE, ON DIALOG, ON MENU, ON MOUSE, REDRAW, TITLEW, WINDOW and about 40 more new statements.

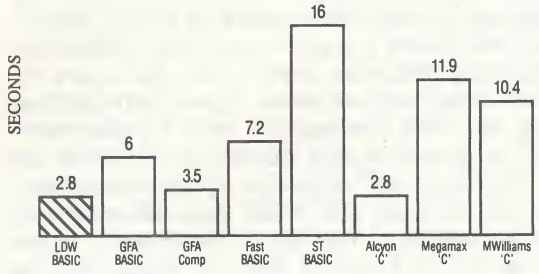
LDW BASIC Rev. 2.0 is a stand-alone development tool, but it can also compile any program written using the old ST BASIC interpreter or the new ST BASIC interpreter. It is also functionally compatible with BASICs for the Macintosh.

For more information or to obtain a listing of benchmarks contact Logical Design Works, Inc., (408) 435-1445
(In Europe) 022/31 97 52

Compare the following benchmarks and see why LDW BASIC Rev. 2.0 leaves the competition behind!



SIEVE 10 ITERATIONS



CALC — BYTE MAGAZINE BENCHMARK MAY '85

ONLY $89.95

Please add shipping & handling costs

U.S.	2.00
Canada	5.00
Outside U.S. and Canada	10.00

Contact your local Dealer or send check or money order to:

LDW

Logical Design Works, Inc.
780 Montague Expwy., Suite 403
San Jose, California 95131 U.S.A.

VISA, MasterCard or C.O.D. accepted. California residents please add applicab

idea was that the dealers would have a higher margin. But somehow the standard 35% will not be improved, and any increase in dealer profit will depend on holding the line against discounts.) One dealer, with mouth agape, asked Augie how it would be possible to sell a Laser and a Mega for under $4000, as Augie had just repeated, when the cost of the Mega added to the $1900 for the Laser totaled $4700? Apparently the answer from the podium was simple, "The dealer will absorb the difference." When many of the 50 north-eastern dealers listening protested, Augie reportedly replied, "Sorry, that's the way it is." As they erupted out of the seminar, voices were heard to say, "You bet, that's the way it is. They can swing as far we're concerned." The voices were described as angry, lacking understanding.

•

What About Developers? The hottest product to hit the market during our longish wait for Mega's, PC's, lasers, modem's, MicroSoft Word, 1st Word Plus, etc., was PC-ditto. Comdex which has just finished as you read this had a large Atari booth, it was focused almost exclusively on applications for the business world. The Mega was there, the laser, CD ROM drives, a prototype of the Transducer (see below for more about it and "KING", Atari's next generation computer), but standard developers were being elbowed out by UNIX software developers, 18 of them reportedly. Two weeks before the show, most of them had not received inivitations. So much for developers.

Now the Consumer -- The current owners of Atari computers. Are they justified, merely because products have been late (they are for all computers, including the IBM, aren't they), justified in voicing distrust of what they hear from the corporate hand that feeds their hunger for advances in an outstanding computer? For those of you who follow the issue, merely ask yourselves how many times have you been mislead about products and policies?

So the question has to be asked, does the "....War" somehow apply to the current dealers who may not be suitable as outlets, the developers, who filled a gap but can't be suited up for the "big business drive", and the Atari computer owner and would-be-buyer, who has been waiting for "the new magic", only to discover that it's priced beyond his budget at $2800 and $2600 for color and mono ST4's, and currently offers no softwear that will take advantage of its large memory? You don't see Atari's tanks lined up out in front of IBM, or Apple, or even Commodore, who still has so many more of its machines on the market than Atari that some programmers wince at the thought of taking "the ST vow", where half of the market is in Europe. (See Milt Creighton's report on Berlin dealers, where the U.S. "angst" is invisible and the Atari machines whir out the door.)

HARDWARE & EXOTICA

The Transputer, EST, TT, KING, and All That -- Some of you may have heard about the EST versus "the KING". The EST name started several years ago and bespoke a replacement for the ST, with superior innards and high monitor resolution. Like so many of Atari's "new products" these come on as "wind testers", i.e. is the breeze right. As one developer noted, to pay for R&D and production costs, Atari has to be relatively sure of moving 50,000 units of a new hardware product. So if you don't see the Atari PC's you'll know that the math was wrong, i.e. the prototypes either didn't have the draw and appeal, or before they could be produced lower market prices had preceded them. This is not necessarily bad business, in the near term, but it does add to market confusion, "should I buy now or wait" and it generates customer distrust.

EST -- Eventually it may be a machine, but for now the EST is going to be a card that will plug into the Mega card slot. What will it do? Essentially provide enhanced graphics giving you resolution in color equivalent to what you now get in monochrome, 640 by 480, displaying 256 colors with a monochrome resolution for a very high res monitor of 1024 by 768 (or higher). On the monochrome end the question is will the operating system of the mega handle all the demands. When it will be available is anybody's guess.

Ethernet Card -- Reportedly Atari has already assembled one in their R&D lab.

The King -- As if there weren't enough mythical pieces of hardware orbiting the Atari globe, there are now two versions being reported on with great authority. One version is out of Australia. It says that the new machine, the King, will be an ST and a Transputer 800, with 4 meg of RAM, a 40 meg hard drive, detachable keyboard, blitter, and a "production model" to be shown at the Hannover, Germany fair next March. If that makes the blood rush to your head, swing not by your heels waiting for it to arrive. The other version is more like the TT, whispered about last year. There is some evidence that Atari is increasing the pressure on Shiraz and his R&D unit to get this out by Comdex of next summer, or lose the battle to the MacIntosh II. So this KING is a thirty-two bit machine, with no Transputer but with similar memory and hard drive configurations of the first version.

The Transputer -- The Inmos T-800 Transputer has been around for some time in England. Kuma has been casting about for somebody to market it in the U.S. Basically it is a CPU capable of incorporating parallel processing chips or modules. Its attraction is the high rate of speed it can attain. While speed is a mystical thing

in computers and like wine tasters, there is much disagreement about how you determine it, the transputer can accept up to 16 modules of parallel processor chips. With each add-on you increase the speed which starts at 10 MIPS (million iterations per second) by 7.5 MIPS. Some kind of device you might say. Atari hoped to display it at Comdex as a workstation in combination with a Mega ST and doing graphics emulations.

Is it for now? No. Atari says Europe in 1988 and the U.S. after that. So we consumers, who have complained about the 10 months' wait from announcement to purchase date for the Mega's, may indeed smile about what appears to be not so much PH as SH (Product Hype vs Stock Hype). In fact, engineers in the computer business, if you asked them, might suggest that "parallel processing" is five years down the tunnel. On the other hand, Jack Tramiel has worked "miracles" for us before, and if he is able to convince somebody that the idea might "save America", and he can get NASA and the Pentagon and the scions of Star Wars to give him an R&D free ride, who's to say? But when you see the stats for it, hear about the prototype being shown, don't make room in your office for it this year or next. They even have a "suggested" price for this fantasy, $5000; what that will be in 1990 dollars is hard to compute.

CD ROM -- The CD ROM drive that Atari first unveiled to much excitement and fanfare over a year ago is now being sold in England. It was shown at a computer fair in London, and reportedly the exhibitor had some trouble making it perform. It works with both ST's, Mega's and IBM's. What is not clear at this writing is whether it will support CD music disks as well as CD computer one's. Price is unknown but should have been announced at Comdex. Atari ostensible has four CD disk applications now available for the drive.

Laser -- Atari is driving to get the laser out and mated with the Mega so that the two can make Atari DTP (Desk Top Publishing) a reality. The push is for mid-November with the machines already arriving in Canada, and the FCC having approved its sale in the U.S. And the big news, yes, yes, yes, it will have a Post Script software emulator! And the awkward news? The suggestion at Atari that it should only be given to dealers who not only have an ESF, but also an ERF (External Sales Force and External Repair Facility), so that small businesses can keep going with their new Atari equipment without shutting down while their printer is off in someone's repair shop. Be that as it may, if the laser arrives with Post Script software at $1995, it should have market appeal. We are told that software emulation of Post Script, which Adobe has no control over, theoretically should be just as high quality as the hardware ROM version, which is prohibitively expensive, and thus as Bill Price said two issues ago, "Just begging to be cloned".

Blitter -- We have been troubled as we use our Mega ST4 each day, as to why there is not more evidence that the fabled blitter is doing its dazzling stuff. Other than being able to install humongous RAM drives of 2-3 megs, lacking any software that accesses the extra memory, we can only turn to the blitter to tell us that we are using a Mega and not an ST. But if it were not for LEADER BOARD, where the blitter causes your drive to hook frantically, and if there weren't an option block with the blitter showing a check mark to indicate it is active, we wouldn't know it was there. The standard blitter demo is the "flying bird" scene, where several birds flap across the screen, but with the blitter they supposed to swoop across it.

Well, we asked Schneider, the invisible detective, and he reported back that when the blitter was refusing to perform, with quality control down to only five out of 25 good chips, NU (name unknown) at Atari made the decision to take out the functions that were causing the problem. So the original eight blitter functions were cut in half. The fill function and the 3 text formatting functions were quietly exorcised, like devils incarnate, leaving you with the A-line function for graphics, screen replacements, block moves and the line drawing function.

Obviously this raises a host of questions: will Atari announce the neutering of the blitter so that updates may be issued when available, is the blitter worth putting in your machine as it is, and may programmers achieve what the blitter was supposed to, e.g. the fastest text editor in existence, TEMPUS, gets its blistering speed via the skill of the programer and not a hardware chip?

Modifications -- In addition to the price-add-on for the Mega's the 520 STFM's appear to have gone up about $100 in mono versions. The 1040 ST's that are being delivered now have the memory chips under the power supply, which may complicate memory upgrades for those people shunning the Mega's, but will make the addition of the blitter easier, for the plug in slots are now already there. The PC 3000, which was a modified ST with the drive built into the monitor is back on the dance floor to assess takers.

SOFTWARE

Two Biggies, WordPerfect & dBMAN -- Even our publisher, an inveterate data base junkie, smiled broadly when he heard about it. (We have hard info he will be doing a series of data tutorials starting with the next issue.) Yes, Version 4.0

of *dBMAN* is out and 100 % *Dbase III* compatible. For those of you whose eyes glaze when "data base" is mentioned (I'm rubbing mine now), WORD PERFECT Corp. astounded the viewing public at the Northeastern Computer Fest in Worcestor, Mass with a singing act promoting their word processor. Using the theme song from the movie "Top Gun", a be-uniformed "Captain Perfect" enthralled his audience, closing with the line, "Just call me, Perfect". The program has just arrived at CN with its 6 disks and 600 pages of documentation. It packs quite a punch. For those of you who have it, be patient when following the printer installations instructions. You may find your screen turns red and you think you have a lockup and needlessly abort. No. Go to "Special" on the drop-down menus and use "Screen Redraw". And zip, the printer will be installed. For hard drivers, don't follow the installation instructions, instead go to Files, list the files, click on each one twice and then use the copy command in that window to place them in a folder in your hard drive. The disks are in extended format (10 track 40 sector) and this can occasionally be sticky. Watch for CN to provide a full review by Milt Creighton.

Snipits for the Future -- For those of you transported by *BARBARIAN*, I know I was, *TERRAPODS* is here, 100 % mouse controlled, but displaying its smash graphics. Play action involves defending the planet from the pods being dropped from the hovering space ship; it may or may not equal the challenge of *BARBARIAN*. Electronic Arts has finally issued *THE BARD'S TALE*, another high-style graphics adventure, but with repetitive disk access as you go forward. *WORLD CLASS HOCKEY* is fast but lacks stayability. The much talked about *DEFENDER OF THE CROWN* is about to appear. Those 8-bit champions who flew countless hours over Egypt, Syria, China, etc. in your F-15 fighter will be able to settle back at the console of your ST and fly again. *F-15 EAGLE STRIKE* has been seen and played by several and should be in the stores by Christmas; some debate as to the quality of the play, with half saying it is better than the old game and half in doubt. *MARBLE MADNESS*, hit of the arcades, which dazzled Amega fans with its brilliant sharp colors, is considered by some to be a faded beauty on the ST, lacking in clarity and marginal in speed. *KNIGHTS OF THE ORC*, a combined Level 9 and Firebird release, has unique surreal graphics, as though you were traveling in a dream, and much challenge. Those of you who have seen *SPECTRUM 512* and marveled at the colors displayed, be aware there is now a version out there that will display 3000 colors. Infocom adventure fans may have to work on replays. Reports have it that Infocom is dropping both Atari and the Amega because meager sales of individual programs continued to turn up losses for the company.

Compatibility Revisited -- The problem has not gone away. About 15% of the software ostensibly has problems running on the Mega ST4. Some of the popular heavy sellers with some form of lock-jaw are both *PSION CHESS* and *CHESSMASTER, SIKARATE, GFL FOOTBALL, DR. T'S* music programs, *SILENT SERVICE, TEXT PRO, REGENT BASE, OGRE, RENEGADE, XEVIOUS, HACKER* and *MAGNETIC TANK*. Most terminal programs with the exception of *EXPRESS*, and the new *FORUM*. In the public domain area, *DCOPY* is quite unpredictable in its ARC function, of the ARC shells, only 1.2 seems to be clean and clear. Andy Nicola of Futuretronics in Cleveland, Ohio has annotated where the problem resides in each of 115 of 650 programs tested. Interested software companies and developers may query him for where the problem in their program resides.

Erratum. Avant-Garde Systems is not producing a IBM compatible drive that will bit-copy various brands of software. Instead Eidersoft, P.O. Box 288, Burgettitown, PA 15021 will be selling a 5 1/2" drive for IBM software that will run on the ST and sell for $179. Eidersoft will also market a 3 1/2" drive that will do the same for $199. The translator box for the Magic Sac will not be equipped to copy protected software.

REAL PRODUCTS OR STOCK HYPE?

Comdex and Annual Report Time -- The quality of the paper, the dress of the management and lighting of the board room photo of them, the report's cover -- all this is tended to with great care when it comes time for the annual report. Of equal importance is having something new and exciting to include in the report beside "nice numbers". Was Atari's Comdex effort an attempt to convince the public that Atari is heading for the 21st Century and stock owners should climb aboard. The transputer-based enginnering work station, the CD ROM drive, the developers showing unix-based products -- all of this was designed to show that the Atari has "serious machines" and that the MacIntosh is not the only computer that graduated from schools to corporate offices. But are "the new things" ideas or genuine products. Some of questioning voices out there are tinged with doubt and concern that Atari is off on another Alice-in-Wonderland stage show rather than getting out hardware that has the peripherals available to do new jobs and do them well.

The Mystery -- Where is *MICROSOFT WRITE*, back then the ultimate word processor for the ST, and what happened to *1st WORD PLUS*? MicroSoft, who is trying to perfect it for Xmas "obtained" Atari's agreement not to market the latter before they would let Atari sell the former.

ATARI 8-BIT

HARDWARE

130XE	CALL
65XE	CALL
XE GAME SYSTEM	CALL
SX 212 NEW 1200 BAUD MODEM	89.99
U.S. DOUBLER	29.99
XDM 121 DAISY WHEEL LETTER QUALITY	169.99
HAPPY DRIVE FOR 1050	11 9.99
NEWELL 256K UPGRADE	59.99
INSTALLED	89.99
RAMBO XL	39.99
MPP 1150 PRINTER INTERFACE	49.99
P.R. CONNECTION	59.99
PRINTER or MODEM CABLE.	12.99
XETEC PRINTER INTERFACE	39.99
PARROT II SOUND DIGITIZER	49.99
FUTURE'S DOUBLE DENSITY DRIVE	199.99

LANGUAGES

LIGHT SPEED C NEW &EXCITING	34.99
OSS ACTION	49.99
BASIC XL	39.99
BASIC XE	49.99
MAC 65	49.99

WORDPROCESSORS

XLENT'S FIRST WORDPROCESSOR	24.99
ATARI WRITER (CART)	29.99
ATARI WRITER PLUS	39.99
PAPERCLIP	39.99
HOMEPACK	29.99

BUSINESS APPLICATION

SYNCALC	29.99
SYNFILE	29.99
B-GRAPH	29.99
SILENT BUTLER	19.99
ELITE PERSONAL ACCOUNTANT	34.99

TEACHERS

SMS TEACHER'S GRADEBOOK	34.99
SUPRA NETWORK 8 ATARIS TO 1 DISK DRIVE AND 1 PRINTER	169.99

ATARI ST

HARDWARE

520 ST WITH MONOCHROME. WITH COLOR MONITOR	CALL
1040 ST WITH MONOCHROME WITH COLOR MONITOR	FOR PRICES
RAM UPGRADE(INSTALLED)	
520 ST 1.0 MEG	169.99
1040 ST 2.5 MEG	CALL
1040 ST 4.0 MEG	CALL
SUPRA HARD DISK 20 MBYTE	549.99
30 MBYTE	CALL
60 MBYTE	CALL
ATARI HARD DISK 20 MBYTE	549.99
ST CABLE RS232C OR CENTRONIC	EACH 6.99
MONITOR MASTER	45.99
MAGIC SACK PLUS	129.99
MAGIC SACK ROMS	39.99
1040 JOYSTICK EXTENDER	19.99
ATARI SF354 SINGLE SIDED	129.99
ATARI SF314 DOUBLE SIDED	199.99
FUTURE'S GTS-100 DOUBLE SIDED FOR ST	219.99
I.B. DRIVE 5 1/4 DRIVE	224.99

LANGUAGES

GFA BASIC SUPPORTS GEM WELL	49.99
GFA BASIC COMPILER	49.99
MEGAMAX C	159.99
TRUE BASIC	52.99

PRINTER UTILITIES

WORD WRITER TIME WORKS	49.99
TEXT PRO	39.99
PRINTMASTER PLUS	29.99
LABEL MASTER	29.99
CERTIFICATE MAKER	35.99
BUSNIESS CARD MAKER	39.99
REGENT WORD II	59.99
PUBLISHING PARTNER	99.99

DATA BASES

DATA MANAGER TIME WORKS	49.99
SUPER BASE...*NEW*	89.99
REGENT BASE	59.99
DB MAN	89.99
BASE II	49.99

VISIT OUR 2000 SQ. FOOT SHOWROOM OR CALL FOR INFORMATION ON PRODUCT NOT LISTED

OVER 1000 PRODUCTS FOR YOUR ATARI COMPUTERS
OPEN MONDAY THROUGH SATURDAY 10 A.M. TO 7 P.M.

(703)494-3444 METRO 643-1729

ORDER ONLY
1-800-255-3444
OUTSIDE OF VIRGINIA

L&Y ELECTRONICS INC.
13644C JEFFERSON DAVIS HWY.
WOODBRIDGE, VIRGINIA 22191

ATARI SERVICE
AUTHORIZED SINCE 1982

NO CREDIT CARD SURCHARGE
ACCEPTED MASTER CHARGE, VISA, CHOICE

IN STOCK ONLY- SALE ENDS DECEMBER 30,1987

IT'S A SMALL WORLD

By David Small, (c) 1987

THE REAL FORCE BEHIND THE MAGIC SAC

I think there's a lot of people with the talent to do programs like the Magic Sac. I've seen some pretty amazing stuff on the ST, as well as other computers. There's lots of talented programmers.

What there are *not* are very many Joel Rosenblums. If the name doesn't sound familiar, it's because Joel hasn't gotten nearly the publicity I or the Magic Sac have. Yet without him, the Magic Sac would never have even existed.

I'm not sure Joel likes how much hype I get over the Magic Sac. He should get at least half the credit for this product, and yet he seems to be unknown. I'm basically the dreamer that thought this thing up and made it go in terms of software. Joel is the person who did *everything* else. So the intent of this column is to give some credit where credit is very much overdue.

It all started back in high school. We both went to Colorado Academy. At the time, we weren't especially close, but were both into computers. We dialed into a Hewlett Packard 2000C system run by the Jeffco school district, and did all sorts of amazing hacks.

We joined the Jefferson County Computer Club. Now with all the hype about Silicon Valley and the Homebrew Computer Club, and the folks there that went on to fame and riches (Wozniak, Lee Felsenstein of Osborne, and so on), I thought I'd tell you the Denver version.

At the J3C, we met the system operators of the HP system, John Ridges and Phil Tubb. They were very talented folks; a few years later they purchased an Apple][and started making peripherals for it, with a company named ALF. ALF now is a major force in the disk duplicator industry, and John has to be the most talented designer I have ever known. This year, ALF helped us design the Translator. Another member of that computer club was Tim Gill; Tim now runs Quark, Inc., which is another big Apple software/hardware outfit (see *Quark Xpress*, for instance, a fine desktop publishing program). I owe Tim eternally for the party he threw on my 18th birthday, and for helping me spike the punch at my senior prom. And Jon Morris of the J3C is now at Intel; I understand he helped debug the 80386 chip.

So, you see, not everything was going on in Sunnyvale. In Denver, a place no one equates with the computer revolution, great things were already brewing in 1976, when we got out of high school.

We had a heck of a good time in the J3C, and finally, we challenged the system operators of the HP to a trivia bowl. They agreed, and on that big night, yes, the Colorado Academy team beat the operators on such questions as, "What are the first names of Hewlett and Packard?".

I then went to college at Colorado State, Joel went to CU, and we lost track of each other for awhile. Then, while I was learning that I don't like corporate environments at Texas Instruments and CDC, Joel was off getting his Master's in Santa Barbara. He went to work for another computer company in L.A., specializing in copy protection.

We started getting together to go to computer shows, since both our companies were sending us to them. I remember one West Coast Faire where Joel saved me from a rabid boss by hanging around the booth perpetually, not giving the boss a chance to chew me out, because I was "with a customer". I still owe him for that...

So, 1985 came along, I was in Denver, freshly without a job, and the Atari ST was a new machine.

I started looking into why the ST couldn't run Mac software; I recall writing a column for Creative Computing saying that maybe it could. I researched and looked, and found only one reason: the interrupt vector table at $100, which the ST used, collided with variables stored there by the Mac operating system. I couldn't solve that.

And then one night I was looking over the 68901 documentation, and I found that the interrupt vectors could be moved down to $C0, and there really was no reason the ST couldn't run Mac software. I never looked back.

Joel and I went to Comdex in November 1985, and I told him of this dream I had. He was excited about it; he was ready to move on to a new challenge. We talked, and took a long walk along

the Strip in Las Vegas with an Atari rep, who told us of course Atari would be interested in someone making the ST run Mac software -- there wasn't that much software available for the ST.

So Joel and I reached an agreement, which we then put into writing in a one-page document, keeping it as simple and clean as we could make it. He'd fund the operation and do marketing. I'd do the programming. And we'd split whatever fell out of it.

This was an exceptionally brave thing for Joel to do, because if I failed at the program, or if it turned out to be impossible for some reason I couldn't solve, he was going to be out a lot of money.

We came away from Comdex with a 520, drives, and monitors. Remember, this was in pre TOS-ROM days. I had a Mac at home, which Mac ROMs came out of. I started coding seriously, and by the end of November, I had the screen saying it was a broken Macintosh -- but recognizably plotting icons and such.

I spent December writing a debugger that would work in the Mac environment, because I had no idea why the thing was crashing. Joel was still in L.A. through all this; I was in Denver, writing away in my basement. We stayed in close touch.

This was a terribly stressful time, because I was on my own; no one could help me on this. No one knew if it could even really be done. I persevered, though, and wrote thousands of lines of code in marathon programming sessions.

In January, up came the "Welcome to Mac" screen. In February, up came the desktop. And I started to deal with the application programs. MacPaint then came up.

Joel kept the faith and encouraged me. We got an early cartridge prototype from a friend at Atari who wanted to help out, as well as some critical documentation that wasn't ready for public release yet. Joel bought a hard disk for me, because by now the code was 12,000 lines long and the floppy drives were just too slow.

In February, we showed the device for the first time.

Joel set seriously to work at this point, now that we knew we had something. He did the press kits for the "MacCartridge". I contacted a reporter I knew at Infoworld and arranged to show him the device; since it was a good story, what with the use of Apple ROMS and such, he thought it was worth it. The story came out the week before the West Coast show, and we arranged to go there to show the device. I flew out to L.A. and drove with Joel up to San Francisco for the show.

At this point, remember, Joel was out a large amount of money, what with printing costs, airline tickets, machinery, and so on.

Well, the West Coast Faire came and went, with lots of publicity. Apple employees showed up breathing fire, promising lawsuits, and saying "maybe we should break some legs around here". I was pretty intimidated by the whole thing; Joel hung tough, and we made it through the show. (I nearly freaked out when the TV crews showed up; Joel handled the interview with lots of poise). We gave away thousands of flyers with Joel's address on them, and he was shortly deluged in mail and telephone calls.

But the universal consensus was that while it was a fun hack, it wasn't saleable. "Until Apple gives it the okay, it'll never see the light of day", one magazine said. That was probably the darkest hour of the Magic Sac.

But Joel didn't give up. He found out that we were on solid legal ground with the product, and wasn't intimidated at all. In fact, he left his old job, moved back to Denver, and we both set up operations in his dad's office building. (His dad was retiring at that point). We're still there.

And thus began that long summer. I spent it writing utilities for the Magic Sac, and doing lots of cleanup on the code.

It was extremely difficult work, and I would frequently get discouraged. There was so many bugs of the "I have no idea why it crashed" variety that it was very draining. But through all this, Joel was setting up a business, doing all the things I have no idea how to do. He arranged us necessary credit, loaned the company some money to keep us going, found suppliers of weird clock chips and cases we could use, and kept up our correspondence with many people who were interested in the Magic Sac. He did most of the PC board layout, found a PC board manufacturer and a manufacturing plant.

Apple Computer had gotten hacked off at our use of the word "Mac" in our name, so Joel came up with "Magic Sac" for our product name, then found a graphic designer to come up with our "rabbit" logo we now use.

I found out only later that much of this was financed by the judicious use of his Visa card,

and he never troubled me about what a debt he was running up.

We tried to make a show in August, and just weren't ready. I was fairly burned out at this point, but I hung on through the last agonizing ten percent of the work, getting utilities ready and so forth. I have no idea how Joel did it all ... he has a remarkable ability to juggle about fifty tasks at once.

September 1986 rolled around, and the word leaked out we were going on sale at the San Jose Atarifest. Now mind you, we had received hints people might be interested, but we didn't really know if they'd plonk down money for the product. But there we were with our first 200 Magic Sac's, version 1.0. If you'll multiply $30 by 200 Magic Sacs, you'll see how much further Joel was in debt at this point. We were mighty tense, putting it mildly.

By the time the show opened, there was a mob around our booth. We weren't real experienced at these shows. We'd even forgotten to bring change in our cash box! But many things were ready, such as the manuals, the plastic case, the circuit boards, the financing behind all this, the press releases, and a million other things that Joel did by himself while I was doing software.

We sold the two hundred Magic Sacs in four frantic hours. Maybe one example will suffice to tell you how frantic. We'd tell people, "It's $107, and we're out of change". They'd hand us $120, and say, "keep the change". We left the show that night two very tired people, with a suitcase full of money. some twenty thousand dollars. (I felt like a drug dealer or something. I have never felt as paranoid as I did when carrying around that suitcase on the streets of San Jose).

Counting the money that night was one of the most fulfilling experiences I've ever had, and I'm sure it was for Joel, too. It was the first money he'd made in a year-long project and a lot of work. It enabled him to take care of the Visa people who were by now getting pretty upset.

It's a year later now. We've got five people working at Data Pacific -- Joel's company, he was in L.A., remember, when this started -- and Joel manages things. I still pretty much do programming and writing, and leave everything else to Joel.

Without him, the Magic Sac wouldn't be. I wouldn't have had the ST to write it on. There wouldn't have been the publicity Joel worked for. Oh, sure, maybe I'd have written it and released it as shareware or something. But it's far more likely I'd have just gotten a job doing programming for someone else, and only dreamed about the Mac emulator.

So, if you call Data Pacific to order a Magic Sac, you'll talk to Barb, that Joel hired, who will enter your order into a computer, which Joel set up. Someone else here that Joel found will assemble up your Magic Sac, with the case Joel found, the boards he got manufactured with components he found, the cables he brought in from Taiwan, and the manual he had printed and duplicated. And we'll put a sticker on it from the graphics designer Joel found.

All I do is make the software that goes on those two disks in the package -- which is duplicated on disks at a company Joel found.

I hope this gives you some idea of how integral Joel is to our operation, and how much credit he deserves. Without his faith, financing, and hard work on the Magic Sac, it never would have been.

As for our relationship, it's a lot like a marriage (without some of the obvious benefits of a marriage!) We've been smart enough to have clearly defined areas that we don't trip over each other on. For instance, Joel doesn't edit my source code, and I don't balance his check book. We make decisions according to the "rules of war" that any good marriage is run by -- for instance, it's a heck of a lot more important to win the common war than any particular battle, and if someone gets really upset, they cool off before talking about what they're mad about. And they talk about what's bothering them, instead of letting it build up.

We've had some bad times, like when MacBongo (a pirate Magic Sac) and Best Electronics (another pirate Sac) hurt our sales very badly last February. And we've had some good times, such as the ones I've mentioned. Data Pacific has now grown from a one product company to a company that is into other products as well; our Translator will be out the door in a week, and we're doing Translators for other machines as well, plus other products I won't breathe a word about.

So what's my conclusion?

In many ways, I was lucky. I supplied the dreaming and the software. Joel supplied a heck of a lot of work and creativity in all the other areas. I found a partner that had ability where I had none, and combining our abilities, we got the product "out the door". And "out the door" is all that counts.

Atari ST Price List

Effective May 1, 1987

PRINTED ON A LINOTRONIC 300 BY CACI

ST HARDWARE

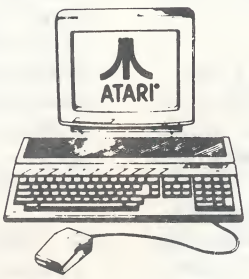
520 ST Mono	495.00
Color	695.00
1040 ST Mono	745.00
Color	895.00
SF354 Drive	149.00
SF314 Drive	229.00
SM124 Mono Monitor	179.00
SC1224 Color Monitor	349.00
Atari 20 meg HD	595.00
Supra 20 meg HD	575.00
5 1/4 Floppy Drive	249.95
MEMORY UPGRADES	
512 K upgrade	149.95
2 meg upgrade	695.00
4 meg upgrade	975.00
Avatex HC 1200 Baud	129.95
Avatex HC 2400 Baud	249.95
Surreal Clock Card	
520 ST	44.95
1040 ST	59.95
ST Stand	29.95
ST Plexiglas Stand	34.95
MAGIC SAC W/ROMs	149.95
MAGIC SAC PLUS W/ROMs	179.95

ACCESSORIES

Disks	
Single sided	14.95
Double sided	19.95
Paper	
1000 sheets	17.95
2500 sheets	31.95
Cables	
Parallel	27.95
Serial	19.95
Mouse Mats	14.95
Covers	
Computer	8.95
Monitor	10.95
Printer	6.95
3 1/2 Disk Drive Cleaner	14.95
Ribbons	
Panasonic	14.95
Citizen 120D	6.95
Epson	8.95

PRINTERS

Panasonic	1080i	175.00
	1091i	219.00
Citizen	120 D	199.00
	MSP-10	289.00



ST SOFTWARE

Word Processing	
1st Word	19.95
Wordwriter	64.95
Textpro	39.95
Habawriter II	69.95
File Management	
Data Manager St	64.95
Datatrieve	39.95
DBman	109.95
TRIMbase	79.95
Regent Base	69.95
Superbase	129.95
Ez-Data	34.95
Graphics	
Degas Elite	54.95
Eazy Draw	59.95
Graphic Artist	159.95
Paintworks	49.95
Paint Pro	39.95
Languages	
GFA Basic	59.95
Compiler	59.95
Megamax C	169.95
Mark Williams C	149.95
AC/Fortran	149.95
Personal Pascal	59.95
AssemPro	49.95
Utilities	
1st Mail	49.95
Desk Master	39.95
Label Master	29.95
FAST	37.95

APPLIED COMPUTERS ASSOCIATES, INC.

MARYLAND
16220 FREDERICK RD
GAITHERSBURG, MD 20877
(CORNER SHADY GROVE RD & RT. 355)
948-0256 OR 1-800-428-2747

VIRGINIA
14506-B LEE ROAD
CHANTILLY, VA 22140
(1 BLOCK W. OF RTS. 50 & RT 28)
631-5377

ATARI IN BERLIN

by Milt Creighton

Last month I visited West Berlin on business and while there, I took the opportunity to look up several of the local Atari retailers. My interest had been piqued by meeting German Atari owners abroad, by stories in the press that Atari was the second largest business computer retailer in Germany, and claims that sales of Atari computers in Germany accounted for more than 30% of Atari sales worldwide.

I don't honestly know what I expected, but I can say I found no Atari banners over the airport entrance when I arrived, and the first two Germans I asked about computer stores (both hotel desk clerks) had never heard of Atari. But then I didn't expect it to be easy.

A dutiful search of the phone book yellow pages turned up several Atari retailers, though Atari was far from the most frequently advertised brand. I also noticed that computer dealers in Berlin aren't concentrated in one area of the city as they are in London. Still, several were within walking distance so I set out to inspect their wares.

The first two dealers I visited were disappointing. The first had a 1040ST "displayed" in one corner of the store window half concealed by the box in front of it, while a Commodore Amiga (prominently displayed in the center) ran through an impressive animation demo. I didn't bother to go inside. The second was much the same, an Atari sign in the window and a few boxes piled in an out-of-the-way corner, but a row of IBM machines in the window. I was beginning to think Berliners were not as technologically enlightened as I thought. I decided to try one more retailer: Computare on Keithstrasse, just off the Kurfurstendamm (main street).

Right away I knew I had found what I was looking for. The familiar Atari logo (in neon, no less) dominated a large modern retail establishment with one of the most impressive window displays I have ever seen in a computer store. In the window were two larger-than-life white plaster humanoid abstract sculptures, kneeling and facing each other. The sculptures looked like a cross between Star Wars storm troopers and Battlestar Galactia Cylon warriors. They each held their arms out to the other and in the cradle thus formed sat an Atari Mega ST2. There were other computer brands displayed in other windows, but closer inspection revealed them to be empty shells: cheap plastic forms, lit by small light bulbs, crude and inoperable. I had no trouble getting the message.

Computare is actually three stores. One resembles a US value added retailer, catering to the business trade and looked very similar to some Computerland stores I have been in. The major difference is where Computerland stresses IBM machines, Computare showcases the Atari Mega ST's. Another separate portion of Computare is a bookstore with the widest selection of computer magazines and books I have ever seen, in both English and German language. The third part of the store is upstairs and serves the hobbyist. This is also where the software is displayed and sold. There are a number of computers displayed (and probably for sale) here as well as all of the Atari ST models. I saw the Amiga as well as various Amstrads, IBM clones, and even the odd MacIntosh. The atmosphere of this store was similar to that of a well-stocked Atari retailer in the US.

Prevaling upon two of the salesmen, I attempted to gain some insights into the Belin computer marketplace. They told me that Atari is still doing well in Germany; in fact, the Megas cannot begin to keep pace with the demand. The 1040ST is still doing nicely, but the demand for the 520ST has slacked off considerably. It seems large businesses are clammering for the Megas while small businesses and serious hobbists appear content with the 1040's. The 520ST was marked as a entry-level machine and a lot of students and hobbists bought them. The reason for the slackening of demand for the 520 is the trend of German software toward programs requiring a full megabyte of memory.

There was quite a lot of software in the store, most of it familiar. The German programs tended toward business applications and programming languages, compilers, and assemblers. The imported software (from the US and Britain) was mostly not translated into German; still, there seemed to be quite a lot of it. The imported software is mostly special purpose programs and games--one salesman told me that German software developers do not care to produce games.

To prove his point, he had only two German-produced games in the store. One was a very nice arcade game called Trash Heap/Dizzy Wizzard which would probably do well here. The other one was based on a famous German comedian's antics and would have difficulty finding a market. The salesmen felt the German business programs are much better than anything produced in the US or the UK, but the templates and formats employed are designed for German business practices and have little applicability outside of Germany.

An exception is Signum!, a text processor which permits on-screen use of up to seven RAM-resident screen fonts. The quality of the output on a 24-pin printer such as the NEC P6 rivals that of a laser printer and it is MUCH faster than Publishing Partner. Look for a more in-depth examination of Signum! in a future issue of CURRENT NOTES. I also saw an additional font disk for Signum! as well.

Among the familar US products were such US programs as Publishing Partner, the Magic Sac, and all of the Infocom games. I saw a lot of UK-produced Firebird products. David Small may be gratified to learn (if he doesn't already know) that the Aladin MacIntosh emulator has been taken off the market in Germany for infringing on Apple's copyright.

Software in Germany is EXPENSIVE! Signum is $250+ at the current exchange rate and it's not being discounted either. A US game which sells for $30 here is $50-$60 in Berlin.

I saw ST Scanner which is a hardware/software product which hooks up to your printer, converting it temporarily to a scanner which is capable of digitizing graphic images and storing them on disk in DEGAS format. It is similar to the IMG Scanner from Seymor-Radix, but more professionally packaged (though I cannot say it produces better results). It costs 220DM (about $125).

One of the more interesting programs I saw was a satelite receiving system for capturing the photographs produced by weather satelites. It consists of an antenna (six-element yagi or parabolic dish), receiver, converter, demodulator, and computer and is currently available for 4000 DM (about $2200). Great for small airports which need hourly weather updates. Program allows automatic retrieval at preset intervals, saves the images to disk, and then prints it.

Advertised Atari prices in Berlin:

Mega ST4 = 3,998 DM ($2200). Includes 4 megabytes of RAM, blitter chip (which is supposed to be available in Germany by the middle of October -- Real Soon Now), new ROMs, double-sided disk drive, monochrome monitor, and battery-backed clock.

Mega ST2 = 2,998 DM ($1665). Same as above, but 2 megabytes of RAM.

1040 ST = 1698 DM ($938) monochrome system, 2098 DM ($1160) color system.

520 STM = 1298 DM ($715) monochrome system. The 520STFM is not offered for sale in Germany.

Make the News

with Easy·Draw!

Create professional-looking newsletters, flyers, ads, brochures, company reports, forms, technical illustrations, and more with Easy-Draw® by Migraph!

Easy-Draw is fast, powerful, and fun to use. Design a page in any format using Easy-Draw's object-oriented text and graphics features. Extensive editing tools make it easy to achieve the results you want. Add bit-mapped and scanned images to your page with the new Easy-Draw Supercharger™.

With Easy-Draw and its companion products you can put together a page layout or design system that meets your needs! Now only $99.95.

Additional Easy-Draw Companion Products:

Supercharger: Add bit-mapped and scanned images to your Easy-Draw page $49.95

Font Pack #1—Contains 2 fonts: Rocky and HiTech (9 pin only) $39.95

Personal Draw Art—Has over 150 predrawn images incl. borders, vehicles, symbols $29.95

Technical Draw Art—Symbol libraries for piping, electrical, floor plan design, etc. $29.95

24-Pin Driver—For use with NEC P, Star NB and Epson LQ printers, incl. Swiss font $19.95

HP Laserjet Plus Driver: 150 & 300 DPI drivers Plus the Swiss fonts. Works with Series II ... $39.95

MIGRAPH

Easy-Draw is a registered trademark of Migraph, Inc. Supercharger and Migraph are trademarks of Migraph, Inc.

Migraph Inc.
720 S. 333rd St., (201)
Federal Way, WA 98003

For more info or to order call:
1 800 223-3729
206-838-4677

DBASIC FOR THE ST

Does the "D" Stand for "Dinosaur?"

Review by Stephen D. Eitelman

INTRODUCTION

Another interactive Basic dialect for the ST has arrived. It is named DBASIC. The authors describe it as an old-fashioned Basic, very reminiscent of the Basic's we had/have on our 8-bit machines and refer to it as a "dinosaur" Basic. They then claim that the "D" was chosen more or less at random. Well...

DBasic uses line numbers, permits multiple statements per line, contains its own operating system, has little or no "user friendly" amenities like TOS and is indeed, very much like a five or ten year old, 8-bit Basic. In my case, I am familiar with Commodore 64 Basic and in general, I felt very comfortable with *DBasic*.

The most significant feature of *DBasic*, however, is its number crunching speed. This is the first Basic for the ST written entirely in assembly language, as opposed to a high level language (like C) and then compiled. *DBasic* achieves additional speed by being an "incremental compiler" rather than an "interpreter". The difference is that in an incremental compiler, each line is compiled when the [Return] key is hit instead of waiting until run-time to compile each statement. This way, a long FOR-NEXT loop, for example, only gets compiled once instead of every time the loop is executed.

In addition to its speed, *DBasic* is very accurate. All floating point functions and calculations are done in double precision. This means 15 significant figures are carried internally with 12 displayed.

No particular attempt has been made by the authors to create a structured language; old-fashioned spaghetti code with lots of GOTO's is a natural with this dialect. The GOSUB function, however, does permit the use of labels in addition to line numbers and the manual strongly recommends the use of labels to enhance readability. Additionally, the REM statement can be replaced with a semicolon to make the use of explanatory statements a little easier.

An unusual marketing approach is being taken with *DBasic*. They essentially are giving away the software -- the package comes with a supply of labels to be affixed to the copies you give away! The authors feel that piracy is so difficult to stop that the trick to being successful is to create a de facto "standard of the industry" by having a large number of copies of their product in use. The software is not copy protected. The way they intend to make money is by selling the manual which is copyrighted thus making it illegal to copy. The manual is also bound, thus making it more difficult to photocopy. They have already given away a large number of manuals and software copies to user groups for evaluation (a few thousand, I understand). While they may be successful in this approach, *GFA Basic* has a big lead which is going to be difficult to overcome.

The authors claim that one cannot have a "luxurious" programming environment with lots of bells and whistles a la *ST Basic* and still get a fast language. They equate the situation to a 1953 Buick versus a sports car -- a soft luxurious ride that does not corner very well versus a fast but bumpy ride. The analogy seems quite accurate. *ST Basic* is certainly not very fast but uses the GEM programming environment extensively; *DBasic* is very fast, but the editor is about as simple an editor as one could have and still be useful.

In their comparison of *DBasic* with other Basic's, the authors avoid any mention of *GFA Basic* or its companion compiler. GFA strikes me as the kind of compromise between speed and luxury that one gets with today's Detroit "sports sedan" - good handling, speed, and comfort.

The authors also refuse to provide any telephone or written technical support. They claim the company is just too small to permit this. The only response available from them is through the order desk and the ONLY thing the order desk will do is take orders. They do accept bug reports by mail and if yours is the first letter to report a bug, you will get a thank you note and a new disk.

DBasic is available only from the company: DTACK Grounded, 1570 Pacheco B-7, Santa Fe, NM 87501. Order desk: (505) 989-9576. The cost is $39.95 plus $3.00 shipping and handling.

DBasic was written by engineers and seems best suited for number crunching applications. It is not really a good general purpose Basic. There is no capability to access the mouse; there are no sound commands; none of the GEM functions are available. This means no music, no dialog

boxes, no menus, no alert boxes, etc. But I found the language to be the best combination of numerical accuracy and speed available on the market today (and the market for Basic's has really proliferated!!).

In using *DBasic*, I found that while I felt quite comfortable with it, I was getting a large number of syntax errors when I began. This turned out to be a result of slight differences between *DBasic* and what I was used to. I found myself looking up just about every command to see what I had done wrong. It was usually quite apparent from the manual. I did, however, have problems tracking down two problems:

* When I first fired up *DBasic*, I just tried writing a simple one line program 10 X = 50. I immediately got a syntax error. The problem turned out to be that the spaces around the equals sign are not permitted. This was not readily obvious and sort of turned me off initially: one really ought to be able to write such an elementary statement without recourse to the manual!

* *DBasic* will absolutely not let one mix integer expressions with floating point expressions. There are occasions when it is not immediately apparent that this has occurred and yet a syntax error is reported. It only took me about three mistakes of this type to immediately suspect the problem every time a syntax error was reported later on! There are commands for converting between integers and floating point variables, FIX and FLT.

Loading *DBasic* into the ST consists of inserting the program disk into drive A and turning on the power. Once *DBasic* is loaded, the user is greeted with a simple menu. Selecting *DBasic* clears the screen and one is now ready to begin programming.

MANUAL

The manual consists of 281 pages divided into two major portions. The first is a description of the design and major characteristics of the language and covers the internal workings of it. It is easy reading, entertaining and highly useful for the most part. The second portion is an alphabetical listing of each of the commands. The listing describes what each command does, its syntax, gives an example, cautions and notes. It is quite thorough.

There is no index, but by and large, I found the table of contents to contain sufficient detail to get me to where I needed to go to answer the question. The manual contains no error listing. But then, what real good has an error listing ever done? Yes, when an error is reported, most Basic's allow one to find the error message in the list, but generally, there is still no hint as to what caused the error. So why bother? I'm with the authors of *DBasic* on this one!

My biggest complaint about the manual is the lack of discussion on sequential files and random access files. If *DBasic* is to be some sort of standard, then the manual ought to discuss the kinds of data files that most of us have become accustomed to. The language itself does not make it obvious how to implement simple sequential files or random access files, although it is probably possible, given the large number of apparently flexible file handling commands. The commands are, by and large, unfamiliar, so I feel there should be some equating to more conventional file commands.

My other criticism of the manual is rather general. The author spent too many pages discussing his pet peeves and philosophizing on how the programming world ought to be. While this was very educational in many instances, it got a little tedious after a while. The section on floating point accuracy in particular really needs a hard-nosed editor to go over it. After plowing through all his table-pounding ranting and raving, I still did not know how many decimal significant figures to expect. In fairness, he does say that 12 significant figures are printed out in the alphabetical listing under PRINT but this took me a while to find. Note that 15 significant figures are maintained for internal computation purposes. If more than (or less than) 12 places need to be printed out, the command CHR$(x%) is available for this purpose.

DBASIC OPERATING SYSTEM

As mentioned earlier, *DBasic* does not use TOS or GEM. They are much too slow and, in particular, both *DBasic* and TOS require use of zero page in memory. *DBasic* has its own disk formatting program that is very similar to Dave Small's Twister. The sectors are staggered so that entire revolutions of the disk are not wasted getting the next sector under the read/write head. Sectors are 1K long instead of 512 bytes. This results in about a 20% increase in the space available on the disk. DOS is also speeded up by a recording arrangement that minimizes file fragmenting, so that again, the head does not have to travel all over the disk finding bits and pieces of the file. The penalty for this arrangement is that some small amount of space will not be used on the disk. But this is essentially no penalty at all.

A COPY program is available for copying the *DBasic* program disk or *DBasic* files. There is also a file called DISKPRIM (for disk primitives) that consists of five subroutines that are intended to be incorporated in other programs.

These subroutines allow one to read and write TOS disks and read and write *DBasic* disks. In theory, one should be able to import files written in *ST Basic* under TOS into the *DBasic* format so as to avoid having to re-type a long program that was originally prepared as an ASCII file under TOS/GEM. I took a quick look at DISKPRIM and made one attempt to actually write a program to do this. It was a failure! And Frank Sommers, our 16-bit editor, insists that I get these articles in on time, so I had to stop fooling around and get the article written! Therefore, I cannot say with absolute conviction that conversion between *ST Basic* and *DBasic* is possible, but it certainly would enhance the usefulness of *DBasic* if it is.

SPEED

Just how fast is *DBasic* in comparison with other available Basic's? This question gets difficult to answer due to different lengths of numerical words. The only really meaningful comparisons should be done with other interactive Basic's that have the same word length. Those requirements reduce the list of comparisons to zero! So we end up having to compare apples and oranges to some extent. The most significant comparison for me was to run the LDW compiler (which should be faster by virtue of off-line compilation and linking) in double precision with *DBasic* (which always runs in double precision -- so both tests use the same word length) in a test involving the cosine squared of an index running from 1 to 10,000. Believe it or not, *DBasic* beat the pants off LDW! *DBasic* was over 5 1/2 times faster. There is still some room for questions here, however. *DBasic* claims to use a mantissa of 48 bits; LDW uses 64 bits in their "high precision" and 48 bits in their "ordinary" double precision. So the test should have used LDW's "ordinary" double precision to keep the word lengths the same. When I did this, however, the resulting answer was only good to four significant figures. I finally chose to compare the versions that gave me the same number of correct digits. This required the use of LDW's "high precision" 64-bit mantissa. The time was correspondingly slow. The time for LDW 48-bit mantissa test was 12.1 seconds, somewhat faster than *DBasic*, but the answer was contaminated with nine digits of random numbers! The results of my speed tests are shown in the table below.

As the table shows, *DBasic* is faster than practically everything for most tests, regardless of length. In the tests where *DBasic* lost, the result is due to longer word length. This is especially true for the creation of 1,000 random strings - *DBasic* allocates a word length of 255 bytes by default. Although this can be changed, I didn't bother.

SPEED TESTS (Times in seconds.)

Test	DBasic	LDW BASIC Ver 1.1	ST Basic	---GFA BASIC--- Com-piler	Inter-preter
A	20.1	114.5	38.0	11.5	15.5
B	2.2	8.2	251.0	3.0	13.0
C	3.0	2.9	31.4	3.3	6.1
D	10.5	6.5	69.0	3.7	7.2
E	7.7	21.6	304.0	7.8	23.5
F	5.9	40.2	105.0	34.1	34.3

Test Description:
A: 1<=I<=10,000 y=cos(I),x=y*y (Fast cos sq)
B: BYTE magazine Sieve, 10 iterations, n=2,047
C: BYTE magazine Calculation benchmark
D: Generate 1,000 random strings
E: Sort random strings
F: Print sorted strings to screen

The authors show their own series of benchmarks in the benchmarks program on the disk. It is significant that *DBasic* also beats up badly on *MegaMax-C* and *Mark Williams C* with the exception of empty FOR-NEXT loops and integer calculations, neither of which bear much resemblance to the real world. The vaunted superiority of C as a programming language for all seasons has dimmed considerably in my humble estimation.

BUGS

I didn't find any that are really serious. The only one I found is just sort of a "peculiarity": there was an occasion when I wanted to use the expression (Y-X^2). This caused an error message "Illegal power operands" to appear. When I changed the X^2 to X*X, the problem disappeared. The complete line was:

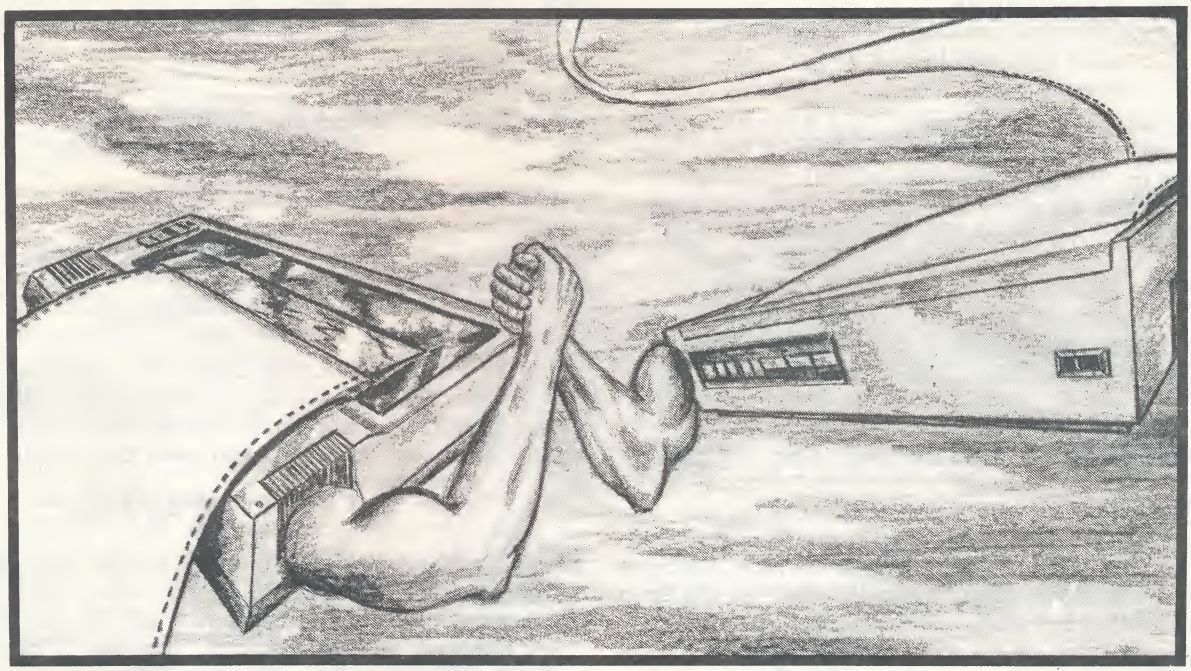
```
160 X1=X*COS(A)-(Y-X^2)*SIN(A).
```

This line was in a program to generate mathematical "chaos" as described in the July 1987 issue of Scientific American, "Computer Recreations". A fascinating subject, by the way.

CONCLUSION

If you want a Basic that has the "look and feel" of your comfortable old eight bit Basic and that has far and away the best combination of speed and accuracy in ANY language available for the ST, get *DBasic*. It has some rough edges and does not use GEM, but is just ideal for number crunching. Even if number crunching is not your primary need, it is a great Basic for weekend programmers who just want to get something working without a lot of difficulty and want it to run as fast as possible. For about $40 plus $3 S&H, I think *DBasic* ought to be in <u>every</u> ST owners software library.

When Printers Get Down to Business



They Get With the XLEnt PRINTWARE SERIES

The 8–Bit Atari software that will really give the business to your Epson, Panasonic, Prowriter, Gemini, NEC, SG, Citizen or compatible printers.

Typesetter $34.95 By Dorfman & Young * †

Get design freedom to create letterhead, posters, title pages, and more. Use the joystick or keyboard driven sketch pad to create and place clip art, logos and graphics anywhere on a page. Loads of graphic, 7+/8 and Printware Series files and lets you control your printer, practically down to every dot on the page! Produce results that look almost professionally typeset. 48K/128K disk

Megafont II+ $24.95 By Dellinger & Rognlie * †

A complete program lister and graphics dumper. This utility is used by most national Atari magazines to print out program listings for publication; but it's much more. Print graphics, 7+/8 and Koala screens, and Printware Series files in multiple sizes. Type direct from the keyboard to the printer in your own custom created fonts or one of the 17 fonts that can be down loaded to your printer. 48K disk

P.S. Interface $29.95 By Castell *

A value-added Print Shop™ interface utility that raises graphic output to new levels of clarity and compatiblity. Integrate Typesetter icons with Print Shop™ fonts and graphics. Convert Print Shop™ fonts to Typesetter icons and select from our four sizes of output. Design custom Print Shop™ fonts and graphics with the P.S. Interface drawing program. 48K disk

Picture Disks $19.95 By Brabson

Use "As is", or edit any of 31 full screen pictures with the entire Printware series.

Icon Disks $19.95 By Brabson *

135 original 1/4 screen sized clip art icons, including seasonal holiday scenes.

Page Designer $29.95 By Dorfman & Young

A layout utility that lets you plan an 8½"×11" page on your screen and then print it. Mix text, graphics and Typesetter fonts for fantastic two-column newsletters. Two text modes; 40 column allows any Atari character set, 80 column puts twice as much information on the same page. Page Designer works with other Printware Series software. 48K disk

Rubber Stamp $29.95 By Dorfman, Young & Dellinger *

A collection of XLEnt creative utilities that let you build a library of high resolution icons, including converted Print Shop™ icons. Create up to four icons at once, and use the only 16×16 character set and text editors available for your Atari. Control the height and width of characters to get 32 different character sizes. Print up to 99 graphic labels with the special label printer. 48K disk

1st XLEnt Word Processor $29.95 By Castell

A fully featured, friendly and fast word processor. 1st XLEnt Word Processor uses a joystick and icon interface, has toggle between full-screen windows, and a very readable 80-column print preview to see what your document will look like. According to Antic Magazine's January '87 review, 1st Word is, "As good or better than any other word processor you'll find for the 8-bit Atari". 48K disk

P.O.Box 5228
Springfield, Virginia 22150
(703) 644-8881
Order Number
(703) 569-8881
Customer Service

XLEnt Software

*ST Versions Available
†MS-DOS Versions Available

TIPS 'N' TRAPS

By Jim Stevenson

Hello again. This month is a tiny bit longer than last month's article, including a very large section on "Lurking Horror" and "Hitchhiker's Guide to the Galaxy", the latest adventure fads this month. Any questions (or answers)? Call:

Me (Jim).....(703)378-4093
Electronic Age.....(703)620-0851
Merlin's Litterbox....(703)250-7303
A.R.M.U.D.I.C.....(703)569-8305

HITCHHIKER'S GUIDE TO THE GALAXY

Q. I've gotten to the point where I'm on the Heart of Gold, but I can't open the "superior" door on the lowel level. I seem to have lost the rest of the guys, they "disappeaered" on the ship and I can't find them. I can't open the door because it asks me to show it something intelligent, and I have tried everything and it just yawns.

-"Flaming Carrot"

Q. How do you get the babel fish? How do you get real tea?

-"Flaming Carrot"

A. Real tea. Ok, on Traal, get the interface. Put it in the Nutramat. Now hit the button. Eventually, you'll get real tea. Also, forget about Marvin's Pantry until you've practally won.

"The Archer"

A. Try hanging the jacket or night gown onto the hook and go from there.

"Fat Albert"

Q. How to you get on Traal in the first place?

"Flaming Carrot"

A. Forget about Traal for a sec. When you first get on the Vogon ship, get the Babel Fish. Then flip the switch. Enjoy the poetry. Find out the word. Type it in. Get the plotter. And have fun! Also, once you've got all that done, try to also get: ATS (Advanced Tea Substitute) and a spare Improbability Drive. You'll need them to get to Traal.

"The Archer"

Q. Does anyone know how to show the door in Hitchhiker's Guide to the Galaxy tea and no tea? I've got the tea. (You do PLUG LARGE RECEPTACLE TO CONSOLE, after replacing the Nutrimat with the circuit board found in the Bugblatter scenario, don't you? Or did no one get that far?)

"Turbo Lover"

LURKING HORROR

Q. I need help killing the floor waxing dude. What do I do with the Urchin?

"Vengence"

A. Well, forget about the urchin for a while. Now, first, you'll need to do something to the waxer itself. Like stop it? Now that you've done that, what object do you have that would sort of slow him down?

"The Archer"

A. To get by the guy waxing the floors, you have to pick up the wax that is in the other room (somewhere towards the beginning of the hallway). Then you have to chop the cord leading to his machine with your axe. Finally, when you get into the room where he is, you have to either spill the wax on the floor, or on him. I poured it on him and it worked, but I don't know about pouring it on the floor.

Jan Meisler

A. I've only gotton to the basement (and through it). Stay away from (or leave him completely alone) the urchin. Mess with him twice and he'll kill you.

"Zor Prime"

Q. Has anyone figured out what to do with the bolt cutter, the flask, the bones, or the urchins with the wires on their heads?

"The Archer"

Q. How do you get past the rats underground? And what do you do with the skeletal hand?

"Vengence"

A. Here's something about the hand. "Dip dip dip, granola dips! Dip dip dip away!"

"The Archer"

A. I was thinking of two ways to get rid of the rats: 1. If you can get the flask through the crack and climb down the ladder, wait till the rats come, go up and pour the liquid down the hatch. 2. Use the coke in the same way.

Scott Hudson

A. The urchin! Show the urchin the hand AFTER you've done something VERY important to it.

"The Archer"

Q. What is underneath the sheet of metal right below the altar? All I hear is growling. What do you do with the knife? What do you ask the Hacker after you feed him? I have 25 points. Is there any reason to go outside, besides getting the note on the roof? And how do you get the keys from the hacker, and how do you log on to the PC?

"Shaman"

A. Wow, that's alot of questions. I hope I remember them all. After feeding the hacker, "ASK HACKER ABOUT KEYS". Then get the _____ key that you didn't see before. When you turn on the PC, first "TYPE 872325412", then "TYPE UHLERSOTH". Ta da! Don't go outside anymore. Save the knife, you'll need it later.

"The Archer"

Q. How do you keep the hand away from the creature? And what does the stone do? Has anyone looked in the hole after dislodging the bricks? And how do you get past the urchins? I was thinking about using the forklift to get past the wall to the machinery room, but then I remembered that you can't get down the ladder!

"Shaman"

Q. What do I do with: Funny Bones, Wall after making a big hole, Bolt cutter, flask, and urchins in the muddy cave. Anyone know what to do?

"The Archer"

STATIONFALL

Q. Where do you take the space truck at the beginning of the game?

Jan Meisler

STARFLEET

Q. How do you get more mines and/or probes? How do you kill Zaldrons?

"Flaming Carrot"

A. To get more mines/torpedos, and probes, just dock with a starbase. It'll replace whatever you are missing including marines. To kill Zaldrons is a tricky skill but you could master it with practice. After each fire phase, look for a momentary BLIP on your short range scan. That BLIP (that only shows as a flash) is the location of the Zaldron.

"Zor Prime"

GUILD OF THIEVES

Q. Could someone please tell me how to bet on the rat race, and how to catch a fish to placate the bear?

Mark Mandolia

AIRBALL

Q. Has anybody ever gotten the spellbook in airball? And if so, please say how.

"Ram Man"

LEISURE SUIT LARRY

Q. Does anyone know how to get the pills off the right windowsill, or how to stop from dying after going to the front of the store?

"Turbo Lover"

A. Well, it is sort of hard to get the pills. That is like near the very end of the game. First you need to marry Fawn I think it is. Then you have to get the rope she ties you up with. Then you have to get a hammer. Go out on the ledge, and figure the rest out yourself

"Jack Flack"

Q. For one thing, do you give Fawn $100 so she'll marry you, as well as pay the preacher $100 so he'll give the marriage ceremony? That's where I'm getting stuck.

"Turbo Lover"

SPELLBREAKER

Q. How do you get by: The Rock Slide, The Ogre, The Roc (getting the cube), and The Serpent. Just tell me which one I should know first. (I think it's the ogre).

"The Archer"

A. Well the ogre is obviously allergic to something (probably ragweed), so what you have to do is increase his agitation. You have to keep the rocks from falling somehow and climb up them while they are in mid-air. The serpent is easy, it is easier to get past him if he is a bit smaller. The roc comes later so don't worry about it, you do have to visit it at least once. By falling in the sky. Later on you will visit it again. As for the 'N'orth wall that you can't get through, don't worry about that. Also, it might help if you try reaching into the zipper.

"Fat Albert"

Q. How do you capture the other rock on the plain? I'd appreciate the exact moves. I ride around, but I have yet to catch him.

"The Archer"

SPACE QUEST

Q. Does anyone know what to do in the rock city? In other words, what do I do in the cave with that red monster, and how do I get across the grating in that cave w/ the elevator?

Jim Stevenson Jr.

Continued on Page 25

PD GEMS FOR THE ATARI 8-BIT

By Alan Friedman

UTILITY #16: TEXTPRO 1.1

Need a very good word processor at a minimal cost? Try *TextPro v1.1*. This is a full-featured word processor that does almost everything the expensive commercial products do. It comes with several utilities including mail merge and multiple copy printing. You can turn word wrap on or off, show carriage returns, change from insert to replace mode, program macros for print keys, cut and paste between files, load a different font to use and a whole lot more.

The file created by *TextPro* can be used to write source code for C and Pascal compilers. It also supports the use of ramdisks. Anyone familiar with *Speedscript* will have no problem with *TextPro*. Most of the commands are the same to the point of having the control bar at the top of the screen. An addition I like in *TextPro* is the ability to determine the amount of memory used and the free memory left.

UTILITY #20: GRAPHICS PROGRAMS

Micropaint is one of those disk that is hard to turn off. Actually, it is a collection of some very good graphics programs. The main one is *MicroPaint*, which is a graphics/drawing program that allows you to draw pictures in four colors with six different fill patterns composed of the four colors. Besides fill, you can draw free- hand, use the line utility or zoom in on an area to work in closer detail. The only thing missing is the ability to draw circles and boxes.

If you want to have text and graphics, run TABLET.BAS which allows you to combine text and graphics using a Koala pad or touch tablet. If you don't have a graphics tablet, you can generate text with a joystick and, after saving it to disk, load it into *MicroPaint* and do your graphics. When you load the picture created by TABLET.BAS, you get an error message, but ignore it and press the [Return] key and start drawing. I have done this with several pictures and have encountered no problems. You cannot go in the other direction. Pictures created with *MicroPaint* will not load into TABLET.

The disk also includes slide show programs and font editors. Custom fonts can be used with TABLET.BAS. Be sure to print out the text files before starting to use this disk. The last couple of paragraphs of MICROPAINT.DOC include a short basic program that shows you how to use pictures you have created in your own basic programs. It is a very basic program but with a little experimentation you can have it showing pictures in a sequence and could really enhance a basic program.

LANGUAGE #11: PASCAL SAMPLER

Want to know what a Pascal source file looks like for the Atari XL/XE computers? Take a look at the Pascal Sampler Disk. This disk not only has Pascal listings but all the programs have been compiled, and since the Kyan Pascal runtime library is on the disk, all the programs will run without having to own Kyan Pascal.

Pascal is a great language for handling text files. That's what most of the programs on this disk do. There is a FOG program that reads a text file from disk and rates its readibility level (the educational level that would be required to comprehend the text).

Along the same lines is CLOZE. With CLOZE you select a text file and print it out with every nth word replaced by underscores. At the beginning of the program you tell it how many words to skip before deleting a word.

PRFILE is a program I use all the time. The source code for it has appeared previously in Current Notes. PRFILE takes a textfile written in a 40 column format and prints it out as an 80 column file. It also prints 60 line to the page and then skips to the top of the next page and prints the page number. This is a great program for cleaning up those documents that come on disks or that you downloaded from a bulletin board. PRFILE will also format 60 lines to the page and give page breaks for files that are already 80 column, but do not have page breaks.

Another file that helps with disk documentation is SEGFILE. How many times have you tried to load a documentation file into your word processor only to find it is too long to get the whole thing into the buffer. This program takes care of that problem. It takes a long file and breaks it into several smaller files of 6000 characters each. Don't worry about where the file will break. there is an extra 1000 character buffer to find a period to end the file. The new files will have the same name as the original file but the extender will become .Fx, with x being the number of the file created. If more than nine files have been created, the upper case letters are used.

NOVATARI XL/XE LIBRARY

I have sent out letters of inquiry to the user groups listed in the last issue of CURRENT NOTES. I hope to find some more groups to trade public domain software with. Novatari still has many 8-bit members who are active users of their personal computers. I feel there will be a future for 8-bit machines as long as we users keep sharing good public domain material.

This month we are introducing 3 new disks: two utilities and one language disk. DOS 4.0 of utility #19 is a single, enhanced (1050), and double density drives. This disk has 10 online help screens. It features three main parts: File Management System (FMS), Command Processor (CP), and Disk Utility Package (DUP). DOS 4.0 is twice as fast as DOS 2.0 and three times faster than DOS 2.5. Graphics #20 has many features: fonts and font editor, touch tablet and koala pad utility files, pictures, several drawing programs, documentation files and a slide show for the 1030XE. The other disk is Language #12, Searcher XLTurbo. This is an application of BASIC XL which searches for designated strings and gives you the option of replacing the string or accepting the default setting.

Prices for WAACE members and CURRENT NOTES subscribers are $3/disk plus $1 for postage and handling for every 3 disks. Otherwise, cost is a flat $5/disk (includes postage and handling). Send checks, payable to NOVATARI, to Alan Friedman, 5951 Heritage Square Dr, Burke, VA 22015.

TELECOMMUNICATIONS
1 850 Interface
2 835/1030 Modem
3 MPP Modem
4A AMODEM 7.2
5 Chameleon Terminal Emulator A&B
6 1030 Express & 850 Express

DEMO DISKS
1 Animation Demos
2 Moviemaker "Clips"
3 Heavy Metal Art
4 Graphic Picture Show
5 Desktop DOS and Demos
6 VizPics

LANGUAGES
1 Fig-Forth ver. 1.1
2 Action! Games: Source code for Games #7.
3 Action! Graphic Demos
4 Action! Utility Programs
5 Action! Modules No. 1
6 Action! Modules No. 2
7 BASIC XL Reference Base
8 Action! Modules No. 3
9 Action! Telecom Kermit source code
10 Turbo Basic/Compiler
11 Pascal Sampler
12* Searcher XL Turbl

GAMES
1 Text Adventures
2 Gambling
3 Simulations
4 Mazes
5 Parlor Games
6 Graphics
7 Action! Games
8 Arcade Look-a-Likes
9 Text Adventures No. 2
10 Text Adventures No. 3
11 Surf's Up
12 Ski King with slope ed.
13 20 BASIC Games
14 Super Quiz A & B
15 Two Graphic Adventures

MUSIC
1 TV/Movie Themes
2 Rock
3 Jazz
4 BASIC Music Programs
5 AMS: 12 Rock Songs
6 AMS: 14 Movie/Video Themes
7 AMS: 16 Oldies
8 AMS: Classics

EDUCATION
1 Mathematics
2 Primary Language
3 Teacher's Toolbox
4 Word Builder 1.0
5 Animated Stories

UTILITTY DISKS
1 Misc. Utilities
2 Printer Utilities
3 DOS 2.5
4 Directory & Label Printer
5 Graphics Trilogy
6 Copymate 130 and 4.3
7 Sector Copier
8 Translator
9 256K Upgrade for 800XL
10 Daisy-Dot NLQ
11 DOS 2.6
12 MACHDOS 2.1
13 Print Shop Editor
14 Easy Find
15 Print Shom Icons #1
16 Textpro 1.1
17 Print Shop Icons #2
18 Touch Edit
19* DOS 4.0
20* Graphics

PIECES OF EIGHT

By Len Paggiali

THE RELUCTANT USERS

Three years ago, in a burst of electronic giddiness, I purchased an Atari 2600 so that my then twelve-year-old son would improve his hand-eye coordination while releasing his pre-teen aggressiveness on bug-like space invaders and stick-figure football players rather than on his four-year-old sibling, or, worse yet, on dear-old-dad. For approximately six months he spent a goodly portion of his free time blasting robots, catching floating luggage, climbing ladders while dodging barrels and duck-like fireballs, and racing cars that looked like car keys instead.

Then one day it all stopped. My son had grown up, became a man, thrown off the toys of his youth, put aside his 2600 and purchased his first Ozzy Osbourne record. Sure, he would return from time to time, if my younger children were playing one of his old games, particularly the two-screen version of DONKEY KONG, and wield his once-mighty joystick for a few moments, but rarely if ever would he venture forth into unknown territories. The pleasures of the newer, more sophisticated cartridges -- SPACE SHUTTLE, the REALSPORTS series and so forth -- held no fascination for him. In short, he had left the video game fold.

It was about that time that my wife and I purchased our first -- and to-date only -- computer, an Atari 800XL. My teenage son showed about as much interest in this event as he had in studying medieval history. From time to time I would call him in to see the results of some simple yet impressive Basic program I had typed in from a computer magazine, only to have my and the programmer's efforts greeted on my son's part by an unappreciative grunt or shrug.

An even more difficult heretic to convert to the silicon cause was my wife, who never had much cared for the 2600, feeling that our pair of joysticks played favorites at her expense. Where my son was merely apathetic toward our XL, my wife was openly hostile. At one time or another, this usually calm, gentle woman has cursed the computer and its primary user in quite colorful language for the following reasons: the cost of the system; the dust it gathers; the room it takes up; her inability to make peace with any of our three word processors; and the terms "Dos", "Dup", and "Boot Error". To her credit not once has she complained about the time I spend with the computer, thereby denying her my company. Perhaps that should worry me.

Until recently my only pro-computer allies have been my two younger children whose combined ages do not add up to that of my teenage son. Nevertheless, age is not always a factor in determining common sense and good taste. Thanks to my patience, determination, ability to indoctrinate young minds, and the generally excellent quality of educational and game software for the Atari, my two little ones show a fervor sometimes greater than my own for the old brown keyboard, the little orange joystick button, and practically anything that comes up on our monitor screen.

I say "until recently" because in the past few weeks much of what I reported has begun to change. My son is preparing his writing portfolio to support his applications for admissions to college film programs, and my wife is writing term papers for graduate courses in education. As a result, each is spending a good deal more time in front of the computer screen, and a good deal less in expressing apathy or hostility toward the very instrument which is now proving so useful to them.

I doubt seriously whether either will ever become a computer aficionado; that would be asking too much. There are hopeful signs, however, that each has begun to come to terms in a positive way with the "sixth member of our family". For that I am thankful.

Thankful I also am for the fact that their increased computer usage has given me an excuse for purchasing a new XE or ST.

FXWP Update. Since writing my review of *The First XLent Word Processor*, I have discovered two annoying bugs in the program. Whenever I erase text using SHIFT+CONTROL+CLEAR (deletes all text from cursor position to end of text), and later use the SHIFT-CONTROL-D function (deletes all text from any point to any point), my previously deleted text from the SHIFT+CONTROL+CLEAR deletion returns to the screen. Also, after using the SHIFT-CONTROL-D function more than a few times, rows of the international letter appear on my screen directly below my text.

Based on his track record for correcting past problems with this otherwise excellent program, I have no doubt that author David Castell will clear up these bugs in his next revision.

RAMDISKS FOR YOUR 320XE

By Alan Friedman

Last month I wrote about the 320K RAM upgrade for the Atari 130XE computer, and the two public domain ramdisk programs I found that utilized this additonal RAM, *SMARTR.230* used DOS 2.0S and *RAMDSK* would work with almost any DOS. I have found *RAMDSK* most useful. This is the one that creates two 707 sector ramdisks.

What I have discovered so far is that you can rename RAMDSK to RAMDISK.COM and it will be loaded at boot-up by DOS 2.5. The two disks created still have to be initialized from your program, or by using the XIO command from basic. This is done by adding two lines to any basic program. They are:

```
XIO,254,#1,0,0,"D3:"
XIO,254,#1,0,0,"D$:"
```

This will initialize both disks.

There are two very good and very popular programs that can take advantage of these ramdisks and work excellently with *RAMDSK*. They are *Express 1030* and *TextPro 1.1*.

In *Express 1030* you can initalize a disk from the opening window by typing "I" and then "3" or "4" at the prompt asking which drive to initialize. You can do this for both drives and have the capability of 1414 ram sectors online for uploading and downloading files. This should pretty well take care of all your disk needs for the allotted time on most bulletin boards. After you have logged off the board you can take your time transferring files to floppy disks or reading messge bases you have captured to disk to read later.

To initialize the ramdisk from textpro you use the CONTROL-M option from the program. This lists the contents of drive 1. Pressing "3" gives you a blank bar in the top left hand corner. Press "F" and you are prompted for the drive number to format. Once again, enter "3" or "4" and the computer will format that drive.

You can now use this space for storing text you are working on and can write macros that automatically store and retrieve from these new ramdisks.

One point I need to emphasis is you must change your DOS to indicate you have more than two disk drives on line. This is done by loading DOS with BASIC, and typing in POKE 1802,15. Once this is done you need to go back to DOS, delete the DOS.SYS and DUP.SYS on the disk and using the "H" command and rewrite DOS back onto the disk. If this is not done, the computer will not know it has more than two drives (and ramdisk D8:) online and will give an error message every time you try to access drives 3 or 4.

* * * * * * * *

Tips 'N' Traps (Continued)

A. The red monster is named orat. To kill him you need something you find in all soft drinks (fizz,bubbles,etc.) To get across the grating you must do what people when they are on a very narrow path 100,000,000 miles below you.

Scott Hudson

SANDS OF EGYPT

Q. I'm in the outer chamber and I can't do anything! What do I do?

Scott Hudson

INVINCIBLE BARBARIAN

Here is the easiest Barbarian Unlimited Lives fix of them all. No files to mess with, no sector editors. After booting up the game, when the first screen appears (the first one that you can move on) type 04-08-59 and Barbarian is totally invincible! Really! Must be the designer's. birthday or something.

"The Lord"

PHAROAH'S CURSE

This is in regards to William Perry's question in Tips 'N' Traps about the secret codes in Pharoah's Curse. These are the two I know: to go from level 1 to level 2, use the code word "SYNAP"; to go to level 3, the code word is "SYNIST".

Neta Fillmore

SPARTADOS TOOL KIT

Review by Richard A. Gunter

Upgrading that trusty 8-bit system can be an attractive alternative to dropping several hundred bucks on a new computer. By adding a little new hardware and jazzing up the software, we can give that old workhorse a new lease on life.

ICD Inc., of Rockford, Illinois, has achieved a commanding position in this market. They're the authors of *SpartaDOS*, the US Doubler, R-Time 8 cartridge, and more. Their latest offering is the *SpartaDOS Tool Kit*.

SpartaDOS has been reviewed in these pages before, but a little background on this powerful DOS is required in order to understand what's in the Tool Kit.

An important SpartaDOS concept, familiar to users of MS-DOS or DEC mainframes, are directory hierarchies. A directory may contain directories as well as data files. When you list the contents of a directory, the files in its subordinate directories are not displayed. You must identify the directory whose contents you want.

Unlike DOS 2.0 and 2.5, *SpartaDOS* is a command oriented operating system. With no menu, a command is typed to perform a function. Thus, "DIR D2:" displays the directory of the disk in Drive 2.

A number of the commands are built into the initial load, while the rest are external. An external function is invoked in exactly the same way as a built-in function: just type its name. The program of that name is loaded and run.

The command philosophy makes this kind of DOS almost infinitely extensible. You can even write your own functions, and think of them as extensions of the DOS.

That's exactly what the Tool Kit is: a set of additional functions for *SpartaDOS*. Most of the new functions are said to work with earlier versions of *SpartaDOS*, but I did my tests with version 3.2d (the most recent) on a 130XE. You shouldn't have any trouble with an 800XL, but the later ver- sions of *SpartaDOS* won't run on an 800. The same may be true for some of the tools.

The Tool Kit disk contains eight utilities:

MIOCFG	SORTDIR	DOSMENU
COMMAND	VDEL	DISKRX
RENDIR	WHEREIS	

MIOCFG is used to save and reload MIO configurations. I couldn't evaluate this one, since I don't have an MIO. According to the manual, MIO users without a hard drive have no way to save configuration data without this utility.

COMMAND is very like Keith Ledbetter's excellent Superkey program (the SpartaDOS version). It allows you to set up characters to be sent to the DOS with a single keystroke. COMMAND allows more key definitions (20, including CTRL-1,2 and 3), and defines some commands not supported by SUPERKEY. "BAT"ch files for the Sparta version of SUPERKEY should work with COMMAND.

The new built-in commands allow you to change screen color, force a reboot by typing "cold", and change the prompt to show the directory path (nifty!).

One of the neatest new commands provided by COMMAND is "ibm", which gives you a "last line recall", with some bells and whistles. The most elaborate recall I've seen is on the VAX systems, where you could recall up to 20 command lines. Here you get one, but it's really handy.

The Tool Kit disk contains "BAT" files for *ACTION*, *MAC65*, and *BASIC* programmers. My main gripe is that COMMAND provides no way to list your current key definitions. Since it intercepts keystrokes and does things to color registers, this program may interfere with some programs.

RENDIR and SORTDIR are directory manipulation functions. RENDIR permits you to rename a directory. Without this little gem, you'd have to delete all the files in the directory to be renamed, delete the directory, create a new directory with the new name, then copy the files into it. A real hassle.

SORTDIR sorts the current directory. The options are to sort by size, file name, extension, or date, in either ascending or descending order. Some of the sorts have a secondary key. For example, sort by date will use time as the secondary key. You don't have complete control of the sort, but the options seem to be entirely adequate.

VDEL, unlike the normal Sparta ERASE command which is unforgiving of user errors -- files selected by this command are immediately erased (deleted) -- provides that second chance. You

are prompted for approval to erase each file. I, of course, NEVER make a mistake with ERASE...

WHEREIS is another useful little rascal, if you use multiple directories. It searches for a file name and reports the path needed to reach it. Since WHEREIS also allows wildcards in the file spec, it can be used to get much the same results as TREE (supplied with SpartaDOS). Thus, the following command will find all the BASIC files on a disk:

WHEREIS *.BAS

DOSMENU provides a menu resembling those of DOS 2.0 and 2.5, and sharing some of the same option codes. "C" is a file copy, and so on. The manual thoughtfully points out that DOSMENU eats some RAM, and may not be compatible with some programs. It requires about 2.6K.

You can invoke this program from command mode by typing DOSMENU, or run it automatically by renaming a copy of it as AUTORUN.SYS. One annoying drawback is that, once activated, there is no escape other than to reboot (option "Z"). It doesn't seem to totally replace the command processor; rather, many of its options generate the equivalent command line, which appears momentarily.

This is the only Tool Kit program in which I've noticed an apparent bug. On my 130XE, booted with BASIC active, option "B" (run cartridge) transfers control to BASIC, as expected. If I do anything in BASIC, the computer locks up. For example, I booted as above, entered BASIC and then typed the immediate statement: ? "HELLO". This should display the word "HELLO" on the screen. However, output is garbled, and the computer locks up.

The problem can be avoided by booting with BASIC off, then turning it on via the built-in command "BASIC ON", or by booting with BASIC on and toggling it, first off then on.

DISKRX is by far the largest and most complex of the new functions. You may never need it, but if you need it, you really need it! DISKRX is a disk editor and damage control program. Its file functions are for SpartaDOS files; no serious support is available for Atari format files and directories. The program is density smart, and 256-byte sectors are displayed on two screens. Navigation between the screens is simple and convenient.

In some respects, DISKRX reminds me of the old DISKEY program for single density Atari format disks. There's quite a bit of power here, but you have to know what you're doing. A working knowledge of Sparta disk format is essential.

This brings us to the manuals. The Tool Kit manual is 14 pages, printed on 8.5 by 11 inch paper and stapled. It doesn't have the polished look of other ICD manuals, but contains the information you'll need to use the Tool Kit. Concerning the disk format information (needed for DISKRX), the SpartaDOS manual is somewhat sketchy. It took me a few minutes of playing with DISKRX to figure out how everything hangs together, and I'm no beginner.

I'm told that ICD is planning to release a new version of SpartaDOS (a cartridge) sometime in the next few months. A bank-switching cartridge should accomodate a lot of functions that are external in the current versions of the DOS. Will the Tool Kit be built into the cart? Dunno. It wouldn't surprise me to see some of the smaller functions from the Tool Kit migrate to the cart. Larger and less frequently used items, like DISKRX, probably won't.

In summary, the SpartaDOS Tool Kit is a worthwhile addition to a Sparta-oriented system. DISKRX alone should be worth the price. The other functions, added to the impressive set supplied with this DOS, provide a lot of niceties that aren't available elsewhere. Big computer stuff on the 8-bit.

CLASH: ETHEREAL

HE'S GOT YOUR IMMORTAL SOUL...
...AND PLANS TO KEEP IT THAT WAY!

JOURNEY INTO THE DEPTHS OF A NETHERWORLD WHERE THE GREATEST CHALLENGE A MAN COULD EVER KNOW WILL OCCUR: YOU MUST SOLVE SATAN'S THIRTEEN UNSOLVABLE RIDDLES, BANNISH HIM TO THE PITS OF HAIDES, AND RECLAIM YOUR IMMORTAL SOUL! SATAN CHEATED IT AWAY FROM YOU SO YOU ARE DETERMINED TO GET IT BACK... ..OR THERE WILL BE HELL TO PAY!!!

PROGRAM FEATURES:

› ARCADE-ACTION MOVEMENT, ATTACK, AND SOUNDS!
› 5 DUNGEONS COMPRISED OF OVER NINETYFIVE UNIQUE SCREENS!
› CONTROL YOUR CHARACTER WITH SIMPLY THE KEYBOARD OR WITH BOTH KEYBOARD AND JOYSTICK!
› ELEVEN DIFFERENT TYPES OF FULLY ANIMATED FOES!
› MAGIC STONES, FOUNTAINS, HIDDEN WARPS, AND TRAPS!
› 5 INDIVIDUAL GAME POSITONS WHIH CAN BE SAVED RESTORED AT ANY TIME DURIG GAMEPLAY!
› THIRTEEN RIDDLES: RANGING IN DIFFICULTY FROM AVERAGE TO ADVANCED!
› OVER 40 VOCAL COMMAND PHRASES, 27 KEYBOARD COMMANDS, AND 60 HINTS AND CLUES TO BE AQUIRED!

FOR ATARI 400, 800, XL'S, AND XE'S

SEND 14.95 TO: THE IMAGISTS GROUP
BOX 1428
FAIRFAX, VA 22030

(C) 1987 THE IMAGISTS GROUP

ADVENTURES IN THE MAGIC SACDOM

By Jeff Greenblatt

MURPHY'S LAW AND THE TRANSLATOR

I'm not sure which of Murphy's Laws applies, probably more than one of them. I can think of at least one of them; "What can go wrong, will go wrong". This is the best phrase that can be used to describe Data Pacific's quest to produce and finally distribute the Translator, the drive for the Magic Sac.

In Dave Small's own words, I'll let him tell the story. The following messages were posted on the ST Roundtable of GEnie:

* * * * * * * *

Message 12 Fri Sep 25, 1987
DAVESMALL [dsmall] at 23:42 EDT

Due to some parts procurement problems (a supplier gave us a shipment of bad parts which, when plugged into the Translator boards, damaged other chips), we're going to have to slip a little from the Oct. 1 shipping date. I'm sorry about this, folks, but there's no way we can retest all the boards that might have gotten hurt and re-burn in the processors we had to swap out by then. (You can read the full saga in The Pub topic here, if you're interested. Shows you what us hardware types go through to get a product out).

Anyway, we still expect to make it within the 8 weeks we promised on the order form, I just don't think we'll make the October 1 date. We certainly tried; we just decided that we really needed to retest each board, and the diagnostics in there now take awhile to run.

In a month I'm sure this will just be a memory for me; I hope so. Typical parts problem. I did want to let you know as soon as we made the decision to retest so you wouldn't be looking in your mailbox October 1. 1.

-- Thanks, Dave

* * * * * * * *

Message 34 Fri Sep 25, 1987
DAVESMALL [dsmall] at 23:34 EDT

News from the Front--

It's been a pretty poor week at dP, overcoming various problems. Take for instance the Raving Idiots at Raving Idiot Chip Supply, Inc. (The names have been changed to reflect the truth). Now Raving Idiot Supply took a big order from us some time ago, promised it to us several Thursdays back. Comes Friday that week, we call. Well, gee, says the girl who's been promising us our Translator parts,"Your credit application didn't go through. We can't ship."

DP has really excellent credit, so we're mystified. What's going on? So we say, fine, who needs credit? Send the stuff COD, no problem, we've got the money to pay for it. Just send it, we need it fast.

Dingbat at Raving Idiot Chip Supply then starts not calling us back. Finally, late Friday, we talk to her manager. It seems that their Credit App. people are swamped, and our order never made it past credit approval. Dingbat didn't do anything with our order, and most of the parts are unavailable or 6-weeks backlogged. These are the same parts we were promised for Thursday. Dingbat then used the Patented Excuse of "your credit isn't approved yet" to cover herself for not doing anything.. which we found out when we offered to pay cash up front.

So, we ordered what we could, some D to A converters, from Raving Idiot, and scattered across Byte magazines, etc, ordering the others parts that Raving Idiot Chip Supply had shafted us on. You know, Fed Ex numbers, UPS red, the whole bit. Darn it, here are we with boards just waiting to be stuffed..

So the parts come in, and we're running late, thanks to Raving Idiot. And then zero, absolutely zero, of the boards come up when we test them. What on earth?, we say. The prototypes work like a champ. I go and write diagnostics like mad, looking for the trouble. Gee, the boards have Big Problems. Can't even get the on-chip transceiver to talk to me over the MIDI port. I spent three days burning ROMS and tearing my already thin hair out.

Finally, faced with maddening inconsistency (for instance: I can HALT the processor, and see it happen, but if I try 100 NOP's, the HALT fails... am I getting an interrupt or what... dma line bad?...). I follow my old friend Wayne Smith's advice and "pull chips out until it starts working".

I get to the AD558, which Raving Idiot supplied us.. I pull it out, and the boards suddenly develop Clean Data Bus. Before that, things looked pretty bad.. suddenly the signals go clean. The

processor is still dead, so I swap it and the boards start coming up. (Sorry for the typos .. this all still gets me sort of irritable).

Well, surprise, surprise. Raving Idiot Chip Supply gave us chips that are MARKED as AD558's and ARE NOT. I don't know what on earth they are.. your guess is as good as mine. It's a 14 pin chip. It trashes data busses it's hooked up to, and kills processors that it's on the board with. It did this to a number of perfectly good 64180 processors.

So, the one part that Raving Idiot Chip Supply managed to get to us has managed to screw up our Translator production beyond belief. Heck, if I'd known those chips were ALL bad, I could have gone to Glendale and not spent the weekend writing diagnostics, looking for a nonexistent problem. (*deep urge to choke the people at Raving Idiot*)

And the saga continues... will Dave flip out totally before the Translator ships? Will we mail a road-killed deer to Raving Idiot, freight collect? Will we ever finish RE burning in the boards to look for other parts possibly damaged by the fake 558's?

Stay tuned...

* * * * * * * *

Message 42 Tue Sep 29, 1987
DAVESMALL [dsmall] at 02:22 EDT

Good ol' Raving Idiot Chip Supply (a really apt name, I might add). We finally found what they gave us in the IC MASTER -- a CMOS counter and timer. It was kicking out bad spikes on the data lines, bucking the other chips, and putting out nice unhealthy stuff to my favorite PAL.

Lots of damaged and maybe damaged parts later, we're still picking up the pieces.

And yes, we're thinking of doing something to Raving Idiot. They've cost us a lot of time and effort, and maybe even money. Besides, I really hate to be late shipping stuff to my friends!"

* * * * * * * *

As you can tell from the above messages, the shipping date for the Translator has been delayed. If you haven't received yours by now, be a little more patient. As I write this article, the last time I checked with DP they had in excess of 300 orders for the Translator. The first production run was limited to 100 units, so it will be a little while until DP can produce units for this unexpected demand, especially with Murphy's Law messing things up.

THE COMPATIBILITY LIST

As promised in last month's article, an extensive compatibility list has been developed for over 100 commercial programs. If you don't see a title on this list, it doesn't mean that it doesn't work; it just hasn't been tested.

The commercial products listed in the table have been tested with version 4.52 of the Magic Sac, using Finder 4.1/System 2.0 and Epstart 2.5 on a 1MEG ST configured as a 832K MAC. Unless otherwise noted, all applications that work, do so with the above listed setup. Under the comments column, 5.3/3.2 indicates that Finder 5.3/System 3.2 or higher is required for the application to run properly.

Due to space limitations, I had to limit the comments line. Some applications are protected and can not be ported over to Magic format disks. When the Translator is released, these titles will be retested. Other titles with a (U) in the comments column indicates that the program is protected but an unprotected version was tested and it works. I uploaded a listing with a much more detailed comments section to the GEnie St Library 14; it's file #4413.

MACBEEP REVISITED

Last month I failed to give credit where credit is due. MacBeep, as mentioned in last month's article, provides sound for the Magic Sac. Charles Smeton of Ellicot City, MD hacked an existing Macintosh program to produce MacBeep. If you own a Magic Sac, MacBeep is a must have for your system. MacBeep is also now available on CN library disk #M27, Utilities #3.

NEW LIBRARY DISKS

This month, four new disks have been added to the CN Magic Library. All the files on these disks have been fully tested with version 4.52 of the Magic Sac. As an aside, some of the applications on the CN library disks will not work properly with Finder 4.1/System 2.0. If you find an applications that crashes with 4.1/2.0, then use Finder 5.3/System 3.2 or higher. Make sure you read the "for Magic Sac use" file on the disk for special instructions. Now, back to the new disks.

Disk #M34, GAMES #9, contains six new and exciting games. The titles are 1000 Miles (a great board game), Duckhunt (great graphics - Let's go hunting), Asteroids (more fun to play on the Atari 2600), Cairo Shootout (a unique shooting gallery), Pente (similar to Score Four only it's Five), and Donkey Doo (a Donkey Kong clone). This is by far the best game disk CN has issued to date.

processor is still dead, so I swap it and the boards start coming up. (Sorry for the typos .. this all still gets me sort of irritable).

Well, surprise, surprise. Raving Idiot Chip Supply gave us chips that are MARKED as AD558's and ARE NOT. I don't know what on earth they are.. your guess is as good as mine. It's a 14 pin chip. It trashes data busses it's hooked up to, and kills processors that it's on the board with. It did this to a number of perfectly good 64180 processors.

So, the one part that Raving Idiot Chip Supply managed to get to us has managed to screw up our Translator production beyond belief. Heck, if I'd known those chips were ALL bad, I could have gone to Glendale and not spent the weekend writing diagnostics, looking for a nonexistent problem. (*deep urge to choke the people at Raving Idiot*)

And the saga continues... will Dave flip out totally before the Translator ships? Will we mail a road-killed deer to Raving Idiot, freight collect? Will we ever finish RE burning in the boards to look for other parts possibly damaged by the fake 558's?

Stay tuned...

* * * * * * * *

Message 42 Tue Sep 29, 1987
DAVESMALL [dsmall] at 02:22 EDT

Good ol' Raving Idiot Chip Supply (a really apt name, I might add). We finally found what they gave us in the IC MASTER -- a CMOS counter and timer. It was kicking out bad spikes on the data lines, bucking the other chips, and putting out nice unhealthy stuff to my favorite PAL.

Lots of damaged and maybe damaged parts later, we're still picking up the pieces.

And yes, we're thinking of doing something to Raving Idiot. They've cost us a lot of time and effort, and maybe even money. Besides, I really hate to be late shipping stuff to my friends!"

* * * * * * * *

As you can tell from the above messages, the shipping date for the Translator has been delayed. If you haven't received yours by now, be a little more patient. As I write this article, the last time I checked with DP they had in excess of 300 orders for the Translator. The first production run was limited to 100 units, so it will be a little while until DP can produce units for this unexpected demand, especially with Murphy's Law messing things up.

THE COMPATIBILITY LIST

As promised in last month's article, an extensive compatibility list has been developed for over 100 commercial programs. If you don't see a title on this list, it doesn't mean that it doesn't work; it just hasn't been tested.

The commercial products listed in the table have been tested with version 4.52 of the Magic Sac, using Finder 4.1/System 2.0 and Epstart 2.5 on a 1MEG ST configured as a 832K MAC. Unless otherwise noted, all applications that work, do so with the above listed setup. Under the comments column, 5.3/3.2 indicates that Finder 5.3/System 3.2 or higher is required for the application to run properly.

Due to space limitations, I had to limit the comments line. Some applications are protected and can not be ported over to Magic format disks. When the Translator is released, these titles will be retested. Other titles with a (U) in the comments column indicates that the program is protected but an unprotected version was tested and it works. I uploaded a listing with a much more detailed comments section to the GEnie St Library 14; it's file #4413.

MACBEEP REVISITED

Last month I failed to give credit where credit is due. MacBeep, as mentioned in last month's article, provides sound for the Magic Sac. Charles Smeton of Ellicot City, MD hacked an existing Macintosh program to produce MacBeep. If you own a Magic Sac, MacBeep is a must have for your system. MacBeep is also now available on CN library disk #M27, Utilities #3.

NEW LIBRARY DISKS

This month, four new disks have been added to the CN Magic Library. All the files on these disks have been fully tested with version 4.52 of the Magic Sac. As an aside, some of the applications on the CN library disks will not work properly with Finder 4.1/System 2.0. If you find an applications that crashes with 4.1/2.0, then use Finder 5.3/System 3.2 or higher. Make sure you read the "for Magic Sac use" file on the disk for special instructions. Now, back to the new disks.

Disk #M34, GAMES #9, contains six new and exciting games. The titles are 1000 Miles (a great board game), Duckhunt (great graphics - Let's go hunting), Asteroids (more fun to play on the Atari 2600), Cairo Shootout (a unique shooting gallery), Pente (similar to Score Four only it's Five), and Donkey Doo (a Donkey Kong clone). This is by far the best game disk CN has issued to date.

MAGIC SAC Compatibility List

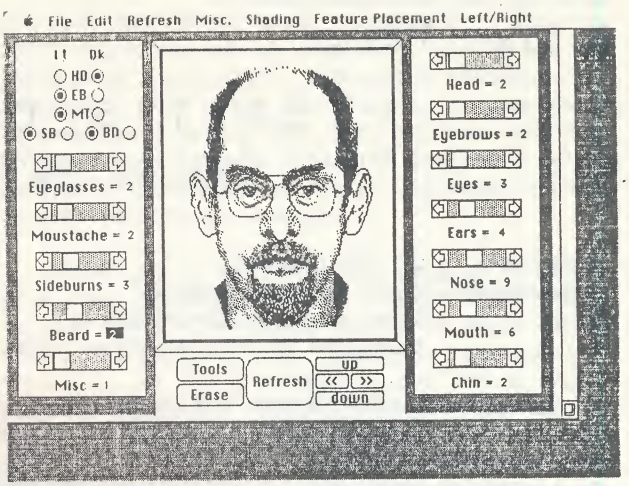
Application	Version	Comments
Acta	1.0	Works
Adobe Illustrator	1.0	Wants HFS
Ancient Art of War	--	Protected
Back to Basics Accounting	--	Locks Up
Battery Pack	--	Works
Calculator Construction Set	1.0	Works
Chessmaster 2000	1.0	Protected
ColorPrint	2.03	Works
ComicWorks	1.0	Works
CricketGraph	1.1	Works
CricketDraw	1.0	Wants HFS
Dark Castle	--	Locks Up
Deja Vu	--	Works
Design Scope	1.0	Works
Dinner at Eight	--	Works
Disk Express	1.06	Works
DMAC III	1.07	Works
Dollars and Sense	1.4	Works(U)
Double Helix	--	Locks Up
Easy 3D	1.0	Locks Up
Electric Checkbook	--	Protected
Excel	1.0	Works(U)
Excel	1.03	Works
Factfinder	--	Works
4th Dimension	1.01	5.3/3.2
Filemaker Plus	2.0,2.1	Works
Flight Simulator	--	Crashes
Fontographer	1.5	Works
Fontastic	2.6	Works
Full Paint	1.0	Works
Graphic Works	1.0	Works
General Ledger	1.1	Works
Gato	1.42	Protected
Home Accountant	1.03	Works
Hypercard	--	Err ID=12
Letter Invaders	--	Crashes
Lightspeed Pascal	1.0	Locks Up
Lode Runner	--	Protected
LogicWorks	1.3	Works
Mac 3D	1.1R1	Works
Mac 3D	2.0	Unstable
Mac 68000 Development System	--	Works
MacBlob	--	Works
McCad PCB Designer	3.1	Works
MacAuthor	1.2	Crashes
MacCoach	--	Works
MacDraft	1.1	Works
MacDraft	1.2a	Unstable
MacDraw	1.9,1.9.5	Works
MacGolf	--	Protected
MacinTax	--	Works
MacLightning	2.0	Works
MacMoney	2.03	Works
MacPaint	1.5	Works
MacPerspective	3.01	Works
MacPlaymate	--	Works
MacPlot	1.5	Works
MacProject	1.0,1.2	Works
MacSpell+	--	Works
Mac the Knife Volumes 1 & 2	--	Works
MacTerminal	2.2	Crashes
MacTools	5.4,6.3	Works*
MacWrite	2.2,4.6	Works
MacWrite	4.5	Crashes
MacZap	4.5	Works*
Mastertype III	--	Works
Math Blaster	1.0	Protected
MaxRAM	2.5	Crashes
Mazewars+	1.1	Works
Mega-Merge	2.1	Works
Microphone	1.1	Crashes
MindWrite	1.0	Works
Minicad	2.0	Locks Up
More	1.1	Crashes
MS Basic	--	Works
MS Chart	1.0	Works(U)
MS File	1.0	Works(U)
MS Fortran	1.2	Crashes
MS Word	1.05	Works(U)
MS Word	3.0,3.0.1	Works
MS Works	1.0	Works(2)
Multiplan	1.02	Works(U)
NFL Challenge	--	Works(3)
ODS/Consultant	1.6	Works
Orbitor		Works
OMNIS 3+	3.24	5.3/3.2
OverVUE	2.0a	Works
Pagemaker	2.0	5.3/3.2
Phoenix3D	L1.0	Works
Pinball Construction Set	--	Protected
PowerPoint	1.0	Works
Print Shop	1.0	5.3/3.2(U)
Printworks	--	Crashes
Professional Composer	2.0	Works(U)
Profit Stalker II	1.2	Works
ProPrint	--	Works
Psion Chess	--	Protected
Ready Set Go	2.1,3.0	Works
Ready Set Go	4.0	Works(4)
Reflex	1.01	Works
Shanghai	--	Protected
Sidekick	1.10b	Works
Silicon Press	1.1	Works
Spellwell	1.2d	Works
Squire	--	1.1g only
Statview 512+	1.0	Works
Stella	1.3	Works
Stepping Out	--	Works
Super Paint	1.0	Works
Tempo	1.2	Works
ThinkTank 512	1.30	Works
Thunder	1.01	5.3/3.2
TK Solver	1.5R	Works
Trapeze	--	Err ID=25
Turbocharger	2.0D	Works
Turbo Pascal	1.00A	Works
Typing Tutor III	1.5	Works
Uninvited	--	Works
VideoWorks	--	Unstable
WriteNow	1.0	Works
Zork I	--	1.1g only

(1) Works except for copy & format features
(2) Works except for Terminal function
(3) Remove Macintalk from system disk
(4) Crashes if a saved document is restyled

Disk #M35, FONTS #5, contains 14 new fonts to add to your system. Some of the fonts will fill in the gaps for fonts you already have. The highlight of this disk is Beverly Hills with font sizes from 9 to 72 point. A complete user manual for Beverly Hills is also included on the disk. Other fonts on the disk are Beehive 24, Boise 18, Chicago 9, Courier 20-28, DeStijl 24, Ham 24, Happy Canyon 12-24, Helvetica 9-14-18-24, Mod. Chicago 12, Old English 12-14-24, Square Serrif 24, Sri Lanka 28 and Worksheet 9-12-18-24.

Disk #M36, CASTLE OF ERT, is another one of those Graphic/Text Adventures produced by World Builder. It's a stand-alone program that will keep you busy for days or even weeks trying to solve it. Don't give up! Save the game and come back to it after you have gotten some sleep.

Disk #M37, MAC-A-MUG DEMO, is the first of a series of Demo disks that CN will be offering. This disk contains an abbreviated but working version of Mac-A-Mug, except the print and save functions are disabled. Several law enforcement agencies are using this program in lieu of the police artist and photo overlay methods of producing composite pictures of suspects. The full working version, at $49, is suppose to have over 100 eye combinations and 200 hair parts.



Mac-A-Mug Screen

It theoretically can produce 10 billion combinations of features. Although print and save are disabled, the clipboard is active. So you can copy a "mug" to the clipboard, boot up MacPaint and paste it into a document and print it out. This demo is loads of fun. Try using it to create "mugs" of your friends and relatives.

ADVANCED TECHNOLOGY NETWORKS
PERSONAL COMPUTER CENTER

SUPER PAINT
* LaserBits for 300 dpi resolution
* Bit-mapped & object graphics
* Multiple document handling
Presentation graphics program offering desktop publishing capabilities.
MagicSac ver. - $ 69.95

STEPPING OUT
Full page display on any size monitor. Expand the screen far beyond its size.
You define the resolution.
Max size - 2048 x 1368
MagicSac - 74.95

EPSTART
Printer utility for any program to print on an Epson printer. Also available for the Toshiba. Will permit any program to print on the Atari STs.
MagicSac - 36.95

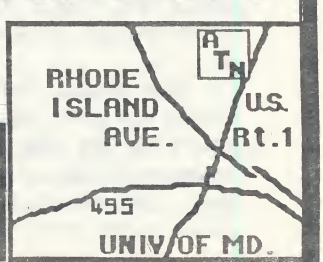
MagicSac+ /ROM - 169.95
Macintosh Emulator for the Atari ST. Includes battery backup clock for both the ST & Mac side.
Call for more Info!

We carry a full line of Mac & Atari Products.
We also provide service to transfer any Mac software to Atari ST.

ADVANCED TECHNOLOGY NETWORKS, Inc.
Twin Chimney Office Park
10724 Baltimore Ave.(Rt.1)
Beltsville, Md. 20705 (301) 937-3605

MC VISA

Mon-Fri
11-7:00
Sat
10-6:00



MUSIC, MIDI, and YOU

By Grant Slawson

DR.T'S COPYIST 1.4

Look Ma, No India Ink Stains!

Program : Dr. T's Copyist.
Application: Music Notation Program
Uses : Enter music on the screen or transcibe it from sequencer files

Everytime I show someone the capabilities of this program, I am met with various forms of visual and verbal amazement. Somehow, the thought of a computer being able to *notate music* astounds people. This capability has been available for the Apple, Mac and IBM for a couple of years, but Dr. T is the first to really do it right for the Atari ST, and the final product looks better on paper than anything I've witnessed for any other computer.

I'd like to begin by thanking Larry Shank at Cal-Com in Wheaton, Md. for providing me with the program to start with. He needed some user produced *COPYIST* documents and I needed a method of notating my sequenced music, and we struck a bargain which has now provided me with no less than *four updates in six months from Dr. T!*

I showed version 1.3 at the June Novatari general meeting, and it was greeted with fascination and a certain amount of skepticism. Most of the complaints about the program came from the fact that it wasn't GEM based. Well, your suggestions were well taken; as of August, version 1.4 was out and fully GEM based.

As stated, *THE COPYIST* is a music notation system which enables the user two methods of creating written music with the Atari ST and a printer. The first method is by creating the blank staves and entering the notes via the ST's keyboard. The second is by converting files created with the *Dr. T KCS* or *MIDI RECORDING STUDIO* sequencers to *THE COPYIST*, which then does the transcription work for you. It was the promise of this capability that inspired me to buy a computer in the first place, as I have been writing and arranging music since I was 10, and have a permanent stain on my index finger from India ink. This program lives up to all the promises and goes a few steps beyond.

The manual instructs us to assign a work file drive and save the configuration to disk before starting the program. We have the option of using a floppy, ram or hard drive for this purpose, but as Dr. T suggests, a ram disk or hard disk is the only logical way to go, or it will take an interminable amount of time for the program to convert from sequencer to copy. *THE COPYIST* does all of it's compiling in this workfile area, and if you use a floppy drive, it must access the disk constantly to rearrange the myriad of information it has to deal with. Between the much slower speed of the floppy disk and the constant access of the drive, the use of drive A or B for the workfile is really an option that should be forgotten about. The preference is a hard drive, but since I don't have a hard drive yet, I use a 200k ram disk, which I autoboot, and assign to drive D. Now, preliminaries are out of the way, let's open 'er up.

We start with a GEM menu with eight options available:

EDIT. Clicking on this gives us a list of files in our familiar GEM window. Selecting a file with a .ME extension puts notes and staves into the edit screen and we begin editing. If you want to create a new file, just type the name and it will appear at the bottom of the editing screen, but the page will be blank.

RESUME. This does what it says, it resumes the editing process where we left it.

COMMAND. This is like a folder which contains the sub-headings Copy, Rename, Erase, Run and Cancel. As they state, you can copy, erase and rename files, but the run command gives you the ability to run another program inside *THE COPYIST* , which overrides it, but when you quit the second program you come back to the menu in *THE COPYIST* rather than the desktop. Very valuable if you forget to save a sequencer file in the proper format for conversion before you leave your sequencer program, but who would do that? *Not ME! (right!)*

PARTS. This is actually a seperate program or module which enables the user to generate seperate parts from a conductor's score, transpose them to another key if necessary, and print them out, but is run inside the main program. This module is unprotected and can be transferred to a disk used solely to generate parts.

SAVE. Nothing fancy here, just the standard save window.

PRINT. This first calls up sub-headings for

Epson, Laser, Plotter and Fonts. The Plotter allows the use of an HP-GL plotter, and the Fonts heading puts you in another module, which allows the creation of 10 user fonts, accessible via the <alt-function> keys.

CONVERT. Here is the heavyweight section of the program. This is where we can either import a sequencer file, or export a copyist file to the sequencer. That's correct, you can actually write the music on the computer screen, entering notes via the computer keyboard, then turn them into sequencer files which can be played back through Midi modules or synths. The reverse is also available, creating the parts by playing them and then converting to written music. Now, before we go any further, go to the kitchen and get a glass of your favorite beverage so we can discuss the fine points without interruption. ..... Comfortable? O.K. here we go.

Editing Music

The edit section shows three staves in medium res and five in high on the screen simultaneously. All the information on the screen can be edited, although sometimes the editing process can be very tedious. If you start from scratch with a blank screen, the first thing you do is place the staves on the screen. By pointing to a location with the mouse and clicking, we set the placement for the top line of the staff, and by pressing Shift "s", the program draws our staff instantly. Now we need to place the brace and the bar lines, so we click on the spot for our left side brace, hit [F6], "b" and "n" for the number of staves the brace is to encompass from 1-9. The remaining bar lines are placed in similar fashion with the user choosing the line on the left side of the cursor or the right. I should point out that the cursor is the standard size, but in outline form, as all the notes are written inside the cursor, and it is easier to see the note with the cursor surrounding it and not blinking.

Now that we have our staff, we can begin placing symbols on it. Time signatures, key signatures, dynamic markings, performance notes and any text can be placed on or about the staff and the page. Notes can now be entered by placing the cursor and striking the appropriate keys to draw a note, (the drawing is instantaneous by the way), or they can be entered through the "keyboard mode", which turns the "Q" thru "]" keys into a simulated piano keyboard, with the "Y" being the note corresponding to the center of the cursor. If you place the cursor on "middle C" for example, then "Y" remains as that note and the keys to the left and right of it are the next step in the C scale. The cursor moves horizontally as you enter notes but not vertically until you move the cursor position manually. This enables unlimited use of this mode, as you are not stuck with a particular typing key permanently assigned to one note, therefore it is unnecessary to memorize a second set of characters just for this mode. Fortunate since the program itself is full of a tremendous amount of information that is not quick to be retained.

Knowing full well that the program is complex, the good folks at Dr. T added a help file to recall all those nasty little commands at the touch of the [HELP] key. Applause, applause! This is a pet peeve of mine with a lot of complicated programs. The button says HELP but it doesn't always yield it. In this case it gives you the entire chapter on editing commands from the manual, which saves alot of time in searching through pages and pages of subscript size type. Could you folks at Dr. T put the manuals out in a little larger print, say a condensed, 17 cpi font, which would be a 100% enlargement! (Sorry, soapbox time is over, but I feel better).

Now that we have our notes placed, we can go back and put the stems and joining bars on them. This can be done one note at a time, from the Join mode, or during writing with the keyboard mode. The join mode enables the user to group notes together that share a common join bar (that's the thick black line you see on notes sometimes). Once this is done, your staff is complete and you go on to the next.

All the standard word-processing features are available in *THE COPYIST* edit screen. You can copy sections of bars, entire bars, whole staves and even pages, then move them and paste them in. I would like to see the ability to save blocks to disk for later use like *Degas Elite*, but the present system uses the blocks during the editing session only. The number of performance markings is incredible, with a great deal of attention being given to proper classical notation. The program is intended to be used by all musicians, not just the studio or the pop music crowd. That's an overview of the editing page, now let's look at the conversion module.

Conversion Module

The conversion module, or Synth Module as they call it, is not copy-protected and can be placed on the disk you intend to use for converting sequence data to music editing files and back again. It also allows you to have a seperate sector on a hard drive for conversions. We start by choosing a file to convert from our sequencer files. After choosing, the program asks us to name the new file, now called a Stream file, ending with .STR. Once named, we see an option menu where we decide the key signature,

time signature, number of parts we want to include (you need not use all the parts you have recorded), and the clef the part is to be placed in (including alto, tenor, and drum clefs!). The program asks one last time if you want to convert, and then off it goes. This conversion can take awhile if you have a large file. I converted a 150 measure song with 5 staves including drum parts, and it took about three or four minutes to convert it.

Once converted, the file is automatically saved to disk, and now you can read it into the Edit mode. Calling up Edit from the menu, we type in the name of our song, but when the screen appears, it is blank. Never fear, just type "pr" and you will get a listing of all the .STR files available for use. Enter the name of the .STR file you want and you get another options page. This time you can decide the final form of the written music, with options for stem direction, dotted values, rests, and even note start and duration quantization times, so the music can come out looking better than you played it. Now hit yes to initiate the process, sit back, and watch the computer draw the staff, bar lines, key signature, time signature, and all the notes at amazing speed. The same 150 measure song I wrote took about 9 or 10 minutes to finish, but the same thing would have taken me hours to do by hand, and then there's that darn ink to fool with...

The module works just as nicely going the other direction, that is from *THE COPYIST* files to KCS files. The process is very similar, but with a slight difference. While *THE COPYIST* can correct some minor timing errors brought over from KCS, KCS cannot read "timing" problems from *THE COPYIST* well. The timing problems with it are caused by the user not vertically lining up notes that are supposed to sound at the same instant or on the same beat. A vertical set of parallel lines are engaged in the Edit screen by pushing [Insert] which span the entire screen vertically. The lines are the same width as the cursor, so you can line up those nasty notes before you convert them. *THE COPYIST* to KCS utility provides the user with the ability to record a song, move it to *THE COPYIST*, edit the actual notes on a page rather than numeric values, and then return it to the sequencer and listen to the final product. A totally interactive system for writing and performing music!

Printing

Now we have our song converted and we add text to it so we know what it is, and then save it. Now we can print the song in two modes, a draft quality and a final or finished quality. The draft is of course much faster and is a good way to check out the file before you go through the process of printing the final copy, which is very slow with a dot-matrix printer. You can also check out the piece on the computer screen, but I find it faster to print it, then check it out where I can get some kind of continuity from start to finish, rather than incessently paging up another two or three staves, (This process is better in high res than medium as you get a little more information on the screen at any one time).

The program comes complete with Epson compatible and Hewlett-Packard Laser drivers, and the Plotter that was mentioned earlier, all of which are unprotected so they can be placed on the printing disk or the printing sector. I use a Panasonic 1092i printer and the final copy is beautiful.

It does take quite some time to print in this mode, about five minutes per page, and anyone who is familiar with this printer knows it isn't slow. I have not seen a laser printer at work, but I'm told it isn't much faster. The greatest amount of time is spent watching the printer make it's graphics passes over blank space the same way it does over printed material. If I could complain about anything in the program, that would be it. Somehow there should be a way to speed it up so it skips over white space, and this would cut the printing time in half. The quality difference is certainly visible, but both are very clean, with very tight dot spacing on the Epson driver, and both can be EASILY read from a distance of 5 feet! My hats off to the gentlemen at Dr. T for a tremendous job on these drivers. I have seen the work produced by other music transcription software for much more expensive computers and printers, and it can't touch this program.

Parts Module

Our final module can extract staves from the score and make single staff parts out of it to be handed to performers or just studied seperately. It can also transpose a part and then print it out (Where were you when I had two semesters of arranging?). This feature can cut the time spent on transposing, copying and compiling parts to 1/12th the normal amount when done by hand, not to mention that insipid ink all over.....

Whew!! What have we got here? We have a product capable of allowing a musician who can't read music well, or even at all, to produce written copies of songs and arrangements he/she is capable of performing on a midi instrument. We have a product that allows a non-keyboard playing musician to enter music from a score, or from his/her mind, and listen to it on any midi

keyboard and/or drum machine. We have the ability to transpose parts, or entire works, and print them out in publishing quality, complete with text and performance notes by the composer. We have a composer's dream come true; complete word-processing capabilities for graphic musical displays rather than just ASCii file notation. We have a winner!!!

The program was written by Crispin Sion for Dr. T's software, and I have watched the program grow from a usable but sometimes frustrating program in April, to a tremendously successful product in just six months! The amount of time and effort that has been placed on this primarily benefits the user, and congratulations are in order to Cris and the rest of the staff at Dr. T's. This is the state of the art in musical notation for the ST and in product support. If you are interested in this type of application, BUY THIS PROGRAM. The retail price is $225.00, and if your time is worth money to you, this can save you hours of tedious writing, not to mention that messy.....

Can't find the 1050?
Call or write for a complete list of
PERCOM PRODUCTS

Finished Drives:
RFD40-S1 SS/DD $189
RDD44-S1 DS/DD $239
AT88-SPD SS/DD w/printer port $199
AT88-S1 SS/DD $139

Add-on Slave Drives:
SS/DD Drive $109
DS/DD Drive $179
Dual Drives S/DD $199
Come with power supply, case and cable.

Upgrade ROM: Corrects time problems in Percoms used with XL/SE series computers. Specify drive model when ordering - $20.
Source code listing: $30.
Also, 600XL 64K Upgrade: $30.

Service & Parts:
Atari, C. Itoh, Citizen, Commodore, Epson, Indus, Percom, Rana, Trak, Zenith

COMPUTER SERVICELAND
14506-B Lee Road, Chantilly, VA 22021
(703) 631-4949

Introducing

LabelMaster™ *Elite*

Here's Migraph LabelMaster Elite™, a fun easy-to-use GEM based label maker and mailing list manager. With LabelMaster Elite, you can create distinctive custom labels that can be used for business mailings, gift tags, disk labels, and much more!

Labels may be printed with designs included with the program or created with the feature-packed Graphics Editor. Print labels with or without designs in a variety of formats including mailing labels, 3.5" disk labels, and 3x5 and 4x6 index cards.

The mailing list manager has all the expected functions plus the ability to flag a record for personal or business use as well as a 48 character comment field.

Once you use LabelMaster Elite you'll never use plain labels again!

Graphics Editor
*100 designs on disk *Line box, circle & mirror drawing commands *Clipboard to cut & paste between designs *Compatible with Printmaster designs

Mail List Manager
*Search, sort, delete & modify records *48 character comment field *Ability to merge databases *Store thousands of names *Freestyle label with 4 lines of text in varying styles

Additional Features
*Works with most 9 & 24 pin printers *Print up to 11 lines of text on disk labels and index cards *Mix print pitch and style on the same line by using special printer codes *Print disk directories

Current LabelMaster owners may update to Elite by returning their disk and $5 to Migraph.

MIGRAPH

LabelMaster Elite is a trademark of Migraph, Inc. Printmaster is a trademark of Unison World

Migraph, Inc.
720 S. 333 St., (201)
Federal Way, WA 98003

To order call:
206 838-4677

IF YOU MISSED OUT HALLOWEEN SALE

THEN DON'T MISS OUR VETERAN'S DAY SALE

A small sample of the sale prices expected on Veteran's Day.

SUNDOG

List Price
$39.95

50%
off

AMAZON

List Price
$39 95

50%
off

MERCENARY
MERCENARY

List Price
$39 95

sale
$9.99

Diskcovery

Diskcovery
Seven Corners Center-Falls Church, VA 22044
(703) 536-5040

MORGAN COMMUNICATIONS PRODUCTS

ST SOFTWARE
WordWriter ST,
DataManager ST,
Swiftcalc ST,
DEGAS Elite,
GFA BASIC,
GFA BASIC Compiler,
OSS Personal Pascal,
ONLY $49.50 EACH!

Publishing Partner
(used for this advertisement)
ONLY $97.50!

Abacus' Assem-Pro,
GST Macro-Assembler,
FoReM ST Version 2.0
A-Calc, A-Calc Prime,
Bumper Sticker Maker,
Business Card Maker,
The Love Quest,
Video Wizard,
MichTron Utilities,
Pro Sprite Designer,
Psion Chess,
Accounts Receivable,
Cash Disbursements,
General Ledger,
Ultima II
ONLY $41.50 EACH!

Introductory Special!!

ATARI SX-212
1200 baud Modem
JUST $87.50!!
Call for current pricing on other ATARI items

MIDI CORNER
Dr. T's KCS,
Dr. T's Copyist
$142.50 each!

Dr. T's MIDI Recording Studio (for beginners)
$29.97

Hybrid Arts'
EZ-TRACK..$49.97
EZ-Score....$69.75
CZ-Android.$69.75
MIDI-Maze..$29.97

CALL FOR PRICES ON ALL OTHER MIDI SOFTWARE

EARLY CHRISTMAS CHANUKAHSALE!

ALL $49.95 LIST PRODUCTS ON SALE
(Including:
Gridiron Football,
DataTrieve,
Music Studio,
Kid-Talk Series)
NOW JUST $34.50!

HARDWARE & ACCESSORIES
Packard Bell 2400 baud
100% Hayes Compatible Modem
$197.50!
Capetronics 2400
$199.97!
Practical Peripherals' 2400 (5 yr warranty!)
$217.50!
Avatex 2400
$229.97!

Capetronics 1200
(Same as Avatex but with ST styling)
$97.50
Avatex 1200HC
$107.50

ATARI XM301
$44.97

PRINTERS
Panasonic 1080i Mark II....$169.75
Star Micronics' NP-10.....$149.97
Powertype (daisy wheel)...$199.97!

WE HAVEN'T FORGOTTEN 8-BITS!

Call or write for complete pricing info on our entire Atari 8-bit product line!

IBM/ST Corner
PC-Ditto (Latest Version!)
$89.95

PARADOX DRIVES
40 track.....$217.50
80 track.....$237.50
Paradox IBM hardware emulator (awaiting FCC)
$350 w/o drive
$475 with drive
runs 4.77 or 8 MHz!

HARD DRIVES
Astra HD+ (includes 720K DS/DD drive and one full year warranty!)
$827.50

Supra 20 meg...$545
Supra 30 meg...$775
Supra 60 meg..$1277

ICD'S NEW DRIVES
all will have DMA and SCSI ports for additional devices, and will be available mid-November in 20, 30,40 and 60 meg capacities.

AS ALWAYS, LOOK TO US FOR THE BEST PRICES IN ST HARDWARE!

$3.00 Shipping Charge for each order. MD residents add 5% state sales tax.
COD'S ACCEPTED (add $3.00)
All pricing and availability subject to change without notice.

(301)983-0925

MORGAN COMMUNICATIONS PRODUCTS
Post Office Box 76175
Washington, DC 20013
(301)983-0925

COMMUNICATE WITH US!

GFA DRAFT

A Two-Dimensional CADD Program

Review by Mike Gibbons

For the person with complex drafting needs or even a novice design student, *GFA DRAFT* should satisfy all your drawing desires. It is a drafting and Computer Aided Design tool, not a pretty painting program. But with it's ease of use and functional menus, this software is a designer's paintbrush and canvass.

The drawing begins in a work window that scrolls across your picture surface. A large, scaled drawing area is available, up to a maximum of 658 x 658 milimeters. Your window has the familiar GEM menu across the top of the screen and a location, help, status line may be displayed at the bottom. There are preset zooming scales from 1/4 of the window size, equal to 38 x 22 mm, up to a scale of 4 times, or 612 x 352 mm. When you change the perspective by zooming, it does not change the dimensions of an object. The screen update after the zoom or with a window change is acceptably fast, and is much faster than with a product such as Auto Cadd on an IBM PC. The scale in millimeters can be changed to inches if you prefer, and various grid sizes may be set. The cursor is configured as a small cross hair or as a screen wide crossbar which is very useful in object alignment. The auto dimension function made my attempts at scale drawing extremely simple.

There are two Gem based menus to choose from and the screen may be changed to inverse if you find the light on dark setting more desirable. This access to GEM will quicken the learning curve of GFA DRAFT, and the manual contains a well written tutorial with excellent practice examples.

The program allows layered drawing with up to ten layers displayed at one time. You may work with up to 255 layers and can achieve a cut away view effect by shading covering areas on upper layers. Various shading patterns are available as well as hatching.

The line functions are fully featured and supported by even more complex circle, ellipse, square, and arc functions. You may store objects as symbols as with electronic symbols or floor plan objects. These symbols may be called in at any time or defined to function keys. This makes repetitive placement of objects in a drawing, as in floor plan design, quick and simple.

The text placed in a drawing appears at the cross hair and may be drawn in four alternative directions. Normal text which is read left to right is the default, 90 degree text is read from the right. Text may also be placed at 270 degrees, so as to be read from the left. If placed with the 180 degree selection, the text is vertical and is read from the top. Text may also be entered appearing as a reflection, similar to what you would see in a mirror.

A window may be defined and objects and text within the window may be manipulated at will. Corners may be made to appear rounded and wall segments may be forced to always meet. You can copy, stretch, rotate, or delete any given area of a drawing. The program is not copy-protected and works well on a hard disk. The available memory is displayed from a menu selection as are all the other program option settings.

The program supports both printers and plotters and comes with a configuration editor in case your printer definition isn't on the disk. The selection of printers is wide and includes most popular 9 and 24 pin devices. I tested the software using an Epson LQ 1000 which is a 24 pin printer. You can select a quicker draft image or a slower plotting high quality image. The high quality image from a 24 pin printer is as good as I would expect, exceptional. I appreciate software that takes advantage of my decision to purchase a higher quality printer.

Both monochrome and color monitors are supported and the documentation is clearly and concisely written. The excitement this product brings is only limited by your imagination. For the creation of a floor plan of your new castle, or that of a complex integrated circuit, this product will guide your mental flow to the output of your printer, quickly and flawlessly.

[GFA DRAFT, GFA Systemtechnik, MichTron, Inc., 576 South Telegraph, Pontiac, MI 48053.]

ATARI SCUTTLEBITS

By Bob Kelly

ATARI AND IT'S COMPETITORS

Prior to "Black Monday" (October 19, 1987), the stock market had been in a period of decline since August. Atari stock at closing on October 16, 1987 stood at $10, down over 30% in the last month and a half (see September column for more details). Rumors about Atari continued to circulate in the user community: Gary Tramiel was focusing on shaping-up Federated stores while Sam runs Atari, implying, of course, that Jack lost interest in running both; dealers didn't have the new products on the East Coast and Canada, implying either poor management or a break down in the Far East supply chain. The rumors multiplied and I could not verify a single one of the many. Complicating the picture is one known fact, Atari fired the last three successive Vice Presidents for marketing, faster, it seems, than the blitter chip can refresh the screen.

To the outside world, this turmoil makes Atari seem not only to be at war with itself, but also with its customers. Thus, by either inference or divine judgement many investors believed something to be wrong in the house of Tramiel. Now along comes Black Monday, the stock market falls by 508 points. Atari's stock (ATC) drops another 20% to $8 per share. Coupling the general economy-wide factors negatively impacting the stock market with Atari's perceived unsettled management situation leaves an investor less than optimistic about short-term performance potential. I have placed an automatic sell order to minimize my loss should ATC decline further.

While this story has been unfolding, other computer manufacturers reported impressive returns for 1987.

APPLE

It was all smiles at Apple Corporation prior to October 19. The firm experienced its second record growth quarter in a row. For the quarter ending September 25th, sales were $786 million versus $511 million for the same period last year, an increase of 54%. For the preceding quarter, sales increased by 42%. For the entire fiscal year of 1987 sales were roughly $2.7 billion versus $1.9 billion in 1986, a 40% increase.

In the final quarter of the 1987 fiscal year, it is believed Apple sold more than 175,000 MacIntosh computers, compared with 85,000 for the same three months of 1986.

The Wall Street Journal reported that some analysts believe Apple can continue pricing the MacIntosh at what the market will bear since IBM will not have a comparable graphics machine for at least 18 months, more likely 24 months. It would appear, market analysts simply do not feel Atari at this juncture is a threat to the dominance of the Mac. Quite simply, the Atari ST appears an also-ran in the business market where the MacIntosh is now considered to be a significant force (see table below).

Market Share By Manufacturer (Jan-Aug. 1987)	
IBM.....	40.3%
Apple.....	19.1%
Compaq.....	15.5%
Epson.....	4.1%
AT&T.....	3.1%
Kaypro.....	2.8%
Others.....	15.1%
Source: InfoWorld	

Despite the success of the Mac, Apple still relies quite heavily upon the Apple II computer line estimated to account for nearly 40% of the company's total sales. A considerable portion of the Apple II sales are to the educational market. Although IBM introduced a machine specifically targeted at the educational market last September, sales have been a disappointment to-date. This criticism can also be aimed at Atari, which seems to have had little impact in the educational market. School systems in the Washington D.C. area which were in the earlier years committed to the Atari 8 bit line do no seem to be purchasing either the 520 ST or 1040 ST as they upgrade.

Apple closed at $36.5 on October 19, down more than $25 per share in the last month. It looks like a good buy at this price.

(Continued on Page 67)

ST WRITER 2.0

A GEM Version At Last!

Review by Milt Creighton

This short article is not intended to be a review of *ST WRITER*; there have been enough of those to choke a horse. Instead, I intend to describe the differences between *ST WRITER 2.0* (also known as *ST WRITER ELITE*) and the version you are probably used to and offer a few thoughts on the utility of this new version.

Having said that, let me state for the record that I believe *ST WRITER* (in any of the incarnations produced by Dr. Noonan) is the best public domain* program (bar none) available for Atari ST computers. It is a powerful word processor and one I use often. While I have said in other reviews that *WordWRITER ST* is the best ST word processor at present, there are some things it will not do at all (such as double-column format) and other things it does poorly (such as its speed of execution). In both of these areas, *ST WRITER* is superior.

Still, there are also *ST WRITER* features (or lack of same) that have caused me a lot of frustration over the past two years. For one thing, I find *ST WRITER* maddening when I am trying to load a file from a folder. I can never remember the path name exactly, or remember which slash mark to use, or remember how to spell the file I saved two minutes ago. It makes for a lot of thrashing around and that is the central reason I have yearned for a GEM version.

ST WRITER 2.0, available on CompuServe, Genie, local Bulletin Board Systems, and from the CURRENT NOTES library (CN #176), is a partially GEM-implemented version of *ST WRITER*. Upon loading the program, clicking the mouse button calls up a dialog box offering you an option to enable the mouse, and move into GEM. Refusing returns you to the familiar non-GEM version of the program.

The GEM screen includes three drop-down menus entitled FILE, EDIT, and OPTIONS. The FILE menu contains all the standard GEM file handling functions as well as PRINT, RECEIVE, and FORMAT options (which, with the new ROM chips, allows fast formatting of disks). Selecting the PRINT option calls up another dialog box which permits sending the file to printer, screen, spooler, or disk. If sending to the printer, you can select either draft or final versions. The OPTIONS menu allows toggling between insert and typeover modes, between normal and high-rez text modes, and between GEM and non-GEM versions of the program. There are other commands to permit selection of colors, use of dead-keys, and special characters -- just as in earlier versions of the program but now executed using GEM menus.

Selecting the EDIT function takes you to a screen that looks just like the edit screen you are used to seeing. Once in the edit screen, you are right back in one of the earlier versions of the program -- with several very useful exceptions. If you click the mouse button again, an arrow cursor will appear which permits placing the text cursor on any character on the screen. No more arrow keys to get to a typo in the center of the screen! In addition, pressing [F8] to merge a text file calls up another GEM file selector box, permitting easy selection of the file you wish to merge -- another nice touch.

When you first experience this GEM hybrid, you get the feeling that Dr. Noonan only did half the job. That feeling is misleading. The mix is a rather elegant blend of the best of the GEM features coupled with the raw speed and power of *ST WRITER*. It's true the GEM features aren't always instantly accessible and the hybrid seems to suffer just a tad in the speed department (being weighted down with AES and VDI calls, I suspect), but it's still faster than anything else around and easier to use than previous versions. The new GEM features do have a price. The program eats 50K more RAM than previous versions, and it does take a little longer to load. The manual needs some punching up to reflect the features of the GEM version in more than the occasional asides in the text. In a future version, I would also like to see a sliding marker in the ruler at the bottom of the edit screen, showing the position of the cursor in the text. It would help in constructing tables.

THE BOTTOM LINE: There will be some who will bemoan the small loss of speed of *ST WRITER 2.0* or complain about the longer time it takes to load, but the improved ease of use imparted by the judicious use of GEM features goes a long way to soothing the limitations of earlier versions of this fine word processor. It may not be the best one on the market, but you can't beat its price.

---

* Although Atari released ST WRITER to the public, Atari maintains its copyright on the product and ST WRITER is not, strictly, in the public domain. - Ed.]

NOW! RUN THESE IBM PROGRAMS ON YOUR ATARI ST.

Lotus 1-2-3	Flight Simulator	Framework	Symphony
Enable	Ability	DESQview	Q&A
Sidekick	Superkey	Norton Utilites	dBase II,III,III+
Crosstalk IV	Carbon Copy	Chart-Master	Print Shop
EasyCAD	DAC Easy Accounting	BPI Accounting	Turbo Pascal
GW Basic	Managing Your Money	Silvia Porter's Series	pfs:Professional File
Word Perfect	Multimate	Dataflex	pfs:Professional Write
Graph-in-the-Box	ProDesign II	Microsoft Chart	Chase Spectrum
Turbo Prolog	R:base 5000	FoxBase +	Dollars & Sense
The Newsroom	Electric Webster	PC-Outline	Exact
Supercalc	Javelin	Knowledgeman/2	Swift Tax

And Hundreds More!

pc-ditto is a software-only utility which taps the power of your Atari ST to imitate an IBM PC XT. No extra hardware is required (an optional 5.25-inch drive may be required for 5.25-inch disks). All your IBM disks will work "out-of-the-box".

pc-ditto features include:

- o both the 520ST and the 1040ST supported
- o up to 703K usable memory (1040ST)
- o not copy-protected -- installable on hard disk
- o imitates IBM monochrome and IBM color graphics adapters
- o access to hard disk, if hard disk used
- o optionally boots DOS from hard disk
- o parallel and serial ports fully supported
- o supports 3.5-inch 720K format, 360K single-sided format, and 5.25-inch 40-track formats

System requirements:

- o IBM PC-DOS or Compaq MS-DOS version 3.2 or above recommended
- o ATARI COLOR MONITOR (Atari mono monitor support will be released this Fall)
- o optional 5.25-inch drive is required to use 5.25-inch disks
- o 3.5-inch 720K DOS disks require a double-sided drive (Atari SF314 or equivalent)

See pc-ditto today at an Atari dealer near you, or write for free information!

$89.95

pc-ditto™
by
Avant-Garde Systems
381 Pablo Point Drive
Jacksonville, Florida 32225
(904) 221-2904

Avant-Garde Systems, 381 Pablo Point Dr.
Jacksonville, Florida 32225 (904) 221-2904
Yes! Please send information on pc-ditto.
Name_____
Address_____
City_____State____Zip_____

RELAX AND ENJOY

By Joe Kuffner, (c) 1987

SOMETHING OLD, SOMETHING NEW MAYBE SOMETHING IN IBM BLUE

It seems like only yesterday that I was commenting on how hot it was outside. My goodness, how rapidly things change. While huddling near the fire in the family room the other day, I had an opportunity to break away from the computer (only for a couple of hours, though) and discover that 75 years had gone by since the last *STAR TREK* movie or show. I could not believe my eyes, until "Bones" showed up looking not a day over 137! I knew watching television was time wasting, but 75 years worth? I knew it was time to shut off the TV and relax in a less time consuming manner - using our favorite computer - the Atari ST.

This month, we have the opportunity of looking at a newly released European action title, *JUPITER PROBE*. My PD-of-the-Month selection is *LUNAR LANDER* (yes, a new version of the same, old program) and a new feature, *PC-DITTO* compatible public domain software. *DRAW POKER 1.0* earned my attention and I hope yours. So, let's get on with the show...

JUPITER PROBE

The title suggests a space mission or perhaps a scientific exploration of our solar system. Well, this program has little or nothing to do with the planet Jupiter or probing for that matter. *JUPITER PROBE*, programmed by Steve Bak of *GOLDRUNNER* fame, published by Microdeal of Europe and released here in North America by Michtron (also, MicroDeal U.S.A. according to the documentation), is nothing more than a shoot-everything-in-sight arcade game.

As far as arcade games go, this program would rate high in the wrist-breaking action category, very high in the graphics/animation category, very, very high in the sound effects and music field, BUT, and a large BUT, the entertainment content rates poorly. This is due, primarily, to lack of variety in the game.

There are basically three types of enemy to slaughter: Enemy Fighters (two shapes: bumblebees bees which are fast and space ships which are slow); Mutations which must be hit a few times to be killed; and, Formations which are large convoys of ships attacking in a formation that makes them easier to kill (figure that one out).

At your disposal is a 2-dimensional ship, which may go forward, back, left or right, with an unlimited amount of canon fire. Other tools for destroying the enemy include a limited number of Ultra-Sonics, which destroy everything on the screen except yourself and Mutations, and Shields which protect you against everything for a brief period. A friendly, talking computer, which warns you of upcoming danger and advises of bonuses received, is also there to assist. With all these devices as a defense, it is obviously an easy game to play and master. HARDLY! Despite the fantastic graphics, the plot is so shallow that boredom overcomes you, even before your wrists get sore, and this in turn means that you won't master the skills required to enjoy the seemingly limitless stages (levels) of play.

In fairness to the programmer, there are many good things about this program. The scrolling is smooth; the backdrop, colorful. The ships are standard arcade game quality. The music that plays throughout (optionally turned off) is excellent, digitized, entertainment. The voice quality of the on-board computer is exceptional -- perhaps the best feature of the program. Control of the game is by keyboard (a sensible selection of keys), mouse (using both buttons), or the joystick. When using the joystick option, you must use the space bar for Ultra-Sonics and Shields as well. All controls may be used interchangeably without specifying. I found the mouse to be the easiest to control. High scores are saved to disk and you may pause the game at any point. A two player match is also possible. Wow, the programmer has paid attention to the tiniest of details. All the desirables are present. First class programming. Or is it?

This program is a unique example of paying attention to details while not paying any attention to the much larger goal of producing an entertaining package. Missing from the program are more varied forms of enemy (perhaps have some which follow the path of your ship) and more varied forms of targets (i.e. instead of just targets in front, have the screen scroll sideways as well, or how about the addition of depth and the shooting of enemy ground-based targets, or enemy that don't fire, or even enemy that split when hit). Arcade games have been around long enough to prove that variety combined with solid programming leads to success. Good individual elements of a game are not enough to make a software product desirable and entertaining. The whole concept must also be a winner.

Oh, I almost forgot to mention - scoring appears to be randomly assigned, or at least unpredictable. The object is simply to stay alive as long as possible.

My recommendation about *JUPITER PROBE* is to stay away from it. If you need a fun arcade addition to your library, choose another Micro-Deal package -- *GOLDRUNNER*. You'll be much more satisfied.

PD-OF-THE-MONTH

LUNAR LANDER. Last month, I recall covering what I called the program with the most computer versions, *BATTLESHIP*. Well, I think I've found a close second. *LUNAR LANDER* has also been translated, in several versions to every computer that I know. This ST version, however, is by far the most addicting that I've played. Programmed by Wayne Babin, in compiled *GFA Basic*, it runs in multicolored Low Res and uses the mouse and joystick for your participation. The program offers three levels of difficulty to your basic mission of landing your jet-propulsion assisted spacecraft on the moon. Also, there is an ever increasing difficulty of terrain and landing areas as you progress to higher levels. The computer keeps track of your successful landings and credits you for fuel efficiency. You hear the normal engine "hissing" while you play which seems to add to the fun factor. Where the game really wins is in the smooth animation and responsive controls. Another nice touch is the high score save feature. This program is available from your User Group's library, the CN library (CN #164), or from BBSs. A fine programming effort.

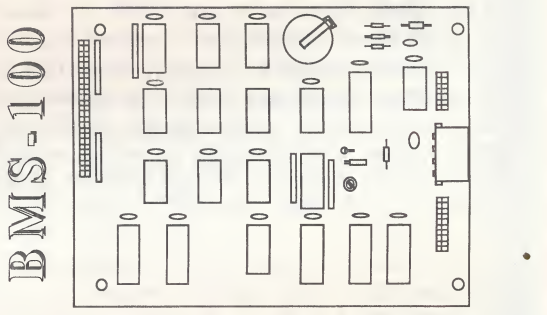
DRAW POKER. A new addition to the PD "game" for the ST is the ever growing list of PC public domain software. Of course, to run this software on your ST, you must be running *PC-DITTO* and *MS DOS* to create the PC operating environment. I must admit that my first glance at PD software for the PC revealed little of interest to me. It seemed that just about every piece of PD software available for the PC was also available as PD software on the ST. Well, upon closer inspection, I found, much to my happiness, that indeed there were significant elements of each of the programs that made it noticeably different to play under the PC environment. One program that earned my closer attention is *DRAW POKER*.

I know what you're thinking. Vegas-style poker machines are available on the ST with excellent graphics and sound against which the PC just could not compete. I agree. However, despite the meagre sound and graphics of this program, it survived my scrutiny. It did so by following true Vegas rules and monitoring the statistics accordingly. For example, the progressive feature of the machine added the appropriate amount to the Royal Flush Jackpot with each play. This really added to the realism of the simulation. Another feature that I found above par was the saving of these stats to disk upon completion. The machine that I was playing had a pay-out factor of 125% and I ended up with 288 coins after spending 187. How could I not like playing? It's this attention to detail that won me over, so to speak.

DRAW POKER 1.0 was programmed by David Sherville and is offered as "Sherware" (the author's spelling) for $15. It plays quickly enough so that the software-based emulator is transparent. A fine PD program for the *PC-DITTO* world.

This month's lesson appears to be the same as in the past. Public domain software is strong competition for commercial programs. Reward your favorite PD authors by sending them a check for the appropriate amount, if it is shareware. Also, when you come across a commercial product that you find unsatisfactory, tell someone. In fact, tell the publisher. The best way to get your message across about inadequate products is not to buy them. If you've already bought it, write the publisher and demand your money back, just as you would for any consumer product that did not live up to expectations! This is the only way that better software will be produced. Survival of the fittest!

The Hard Disk Solution
from Berkeley Microsystems



With the BMS-100 Hard Disk adapter you can affordably add a Hard Disk to your Atari ST™.

- Connects to the DMA port of your Atari 520 or 1040ST
- Hardware and software compatible with Atari's hard disk
- Includes a battery backed up time/date clock
- Uses a standard SCSI hard disk controller
- Can be used with hard disks of up to 64 Mbytes
- Available with an Adaptec ACB-4000 controller

Berkeley Microsystems
360 OAKLAND AVENUE, STE. 5
(415) 465-6956

221B BAKER STREET

The Case of Holmes On the ST

Review by Bill Moes

It began exactly 100 years ago (1887) when a "A Study in Scarlet" was published in the Christmas issue of an English magazine (Beeton's Christmas Annual). Today, Sherlock Holmes is known worldwide. Publications of and about Arthur Conan Doyle's stories and novels rank as a (perhaps *the*) major literary collectible. Indeed, it's been estimated that there have been more than 10,000 printed works about the man from Baker Street.

The adventures of the London detective as narrated by his friend, Dr. John Watson, have become the subject of, among other things, movies, television and radio programs, additional novels by authors other than Doyle, maps, card and board and role-playing games, stamps, plays and musicals, and a computer game or two.

221B Baker Street, a title taken (of course) from Holmes' residence, is a computerized version of the popular board game bearing the same name. The goal is to solve a mystery as quickly as possible by traveling the streets of 19th century London in your search for clues.

The game plays very much like a board game. When your turn starts you'll press the joystick button to set numbers turning, like the roll of a die; another press and you'll be given 1-6 moves. Move your character over spaces on the scrolling screen. When you're ready to enter a building or location, the "board" is replaced by a smaller graphic showing the location's interior.

Text clues are displayed helping you determine the guilty party, method, or time. You can also take a look at the map screen which shows all 15 locations at once. The low-resolution graphics are nicely done, although not terribly sophisticated. Sound effects and music are appropriate, if not special.

There are 30 different cases to solve. Supplemental disks offering additional sets of 30 cases are also available. *221B Baker Street* may be played by 1 to 4 players and you can have your on-screen clues coded if you wish. This will prevent other players from reading them ... until they break your code, that is.

True Holmes fans may have some problems enjoying this one. When the game begins, each player will choose one of four characters: Holmes, Watson, Inspector Lestrade of Scotland Yard, or Irene Adler (to Sherlock Holmes she is always *the* woman).

Placing those other characters on a level equal to the master sleuth is likely to offend many Holmes aficionados. And: the game doesn't really capture the feel of London in the Victorian era ... the cases lack the depth and true mystery many associate with the quality stories from Doyle's pen ... the logic of the solution and the deductive powers associated with arriving at that solution are not always clear. These, of course, are all key qualities for fans.

Others may enjoy the challenge. The game can be played by a single player and a case can then be solved in under 10 minutes with a little effort. *221B* is really designed for two to four players, though, and it then takes on new challenges, with a typical game lasting 20 to 60 minutes.

Find the right clues ... use a badge from Scotland Yard to lock the others out of important locations or use that badge as you attempt the solution ... take an underground tunnel or hansom cab for swift transit ... break the code of competing players ... be the first to return to 221B and name the guilty. After you've solved the case, a text explanation is shown on the screen to further explain the details of the case.

221B Baker Street ($39.95) is not going to be termed the definitive computer version of challenges facing the world's greatest detective. Those who consider Holmes to be a real person and 221B to be a real place, must continue the wait.

If, though, you are looking for a game to be quickly enjoyed by a small group of friends (and that type of game is not always easily found), you'll have 30 cases to solve and others available. Perhaps it will help to remember Basil and Nigel as you relive those movie memories.

[IntelliCreations/Datasoft, 19808 Nordhoff Place, Chatsworth, CA 91311 (818) 886-5922]

CAL COM INC.

2503B ENNALLS AVENUE
WHEATON, MD 20902
301 933-3074 933-3574

Visit Our New Modern Store
HOURS: Monday 10-9
Tue-Sat 10-7 / Sunday 12-5
MIDI DEMOs Every Monday 6-9

S T H A R D W A R E

520ST Monochrome	CALL	SF 354 S/S Drive	$ 139.95	ATARI 1200 ST Modem ..	$ 99.95
520ST RGB Color	CALL	SF 314 D/S Drive	$ 199.95	Avatex 1200hc Modem ..	$ 119.95
1040ST Monochrome	CALL	MicroByte 5 1/4" Drive	$ 239.95	Avatex 2400 Modem	$ 229.95
1040ST RGB Color	CALL	Monitor Master	$ 47.95	Casio CZ-1	$ 749.95
MEGA ST2 Monochrome ..	$1799.95	ATARI 20 MB Hard Drive	$ 574.95	Casio FZ-1	$1799.95
MEGA ST2 Color	$1999.95	Supra 20 MB Hard Drive	$ 574.95	DeskCart by QMI	$ 89.95
MEGA ST4 Monochrome ..	$2499.95	Supra 30 MB Hard Drive	$ 794.95	Midi Cable	$ 4.95
MEGA ST4 Color	$2699.95	Supra 60 MB Hard Drive	$1849.95	Pro Sound Designer ...	$ 84.95
ATARI PC	$ 499.95	ATARI Laser Printer ..	$1699.95	Seikosha Color Printer	$ 479.95
ATARI PC with Monitor	$ 699.95	Okimate 20 Color Print	$ 229.95	ST Realtizer	$ 99.95
SM124 Mono Monitor ...	$ 169.95	Panasonic 1080i	$ 174.95	Micro-Time ST Clock ..	$ 34.95
SC1224 RGB Monitor ...	$ 339.95	Panasonic 1091i	$ 199.95	Surreal-Time Clock ...	$ 44.95
Meg-A-Ram Memory Board	$ 129.95	Panasonic 1092i	$ 349.95	Trade In Old Mouse ...	$ 29.95

S T S O F T W A R E

3D 2.0 Developers Disk	$ 24.95	F-15 Strike Eagle	$ 32.95	Mathtalk Fractions ...	$ 34.95
Aesop's Fables	$ 34.95	Fleet Street Publisher	$ 84.95	Matrix-6 by Dr. T	$ 79.95
Airball	$ 29.95	Font Factory Fonts ...	$ 27.95	MaxPak	$ 39.95
Algebra I, Volumes 1&2	$ 19.95	Font Factory Clip Art	$ 19.95	Micro League Baseball	$ 42.95
Alternate Reality	$ 27.95	Fonts & Borders	$ 24.95	Micro League Wrestling	$ 42.95
Animal Kingdom	$ 27.95	Forth/MT	$ 45.95	Midi Maze	$ 32.95
Architectural Design .	$ 27.95	Fraction Action	$ 27.95	Midi Recording Studio	$ 39.95
AssemPro	$ 42.95	French (W/Audio Tape)	$ 21.95	Midisoft Studio	$ 69.95
Autodual	$ 36.95	Gauntlet	$ 32.95	Modula-2 Développers ..	$ 89.95
Bard's Tale	$ 36.95	Geometry, Volumes 1&2	$ 19.95	MS-DOS 3.2 on 3 1/2"..	$ 69.95
Back Pack	$ 79.95	German (W/Audio Tape)	$ 21.95	MT C-Shell	$ 89.95
Balance of Power	$ 35.95	GFA Companion	$ 36.95	pc-ditto	$ 84.95
Barbarian	$ 29.95	Goldrunner	$ 27.95	Personal Money Manager	$ 34.95
Base Two	$ 44.95	Golden Path	$ 32.95	Phaser	$ 74.95
Biology, Volumes 1&4 .	$ 19.95	GridIron	$ 36.95	Pro Fortran-77 Compilr	$ 99.95
Breach	$ 29.95	GST C Compiler	$ 64.95	Publishing Partner ...	$ 99.95
Business Card Maker ..	$ 42.95	Guild of Thieves	$ 31.95	Quicktran-Modem Accel	$ 27.95
CAD 3D 2.0 CyberStudio	$ 74.95	Hardball	$ 29.95	Read & Rhyme	$ 27.95
Copyist by Dr. T	$ 174.95	High Roller	$ 36.95	Read-A-Rama	$ 34.95
CZ-Android	$ 59.95	Human Design	$ 27.95	Roadwar Europa	$ 29.95
CZ-Patch Librarian ...	$ 79.95	J-Disk (Ramdisk)	$ 19.95	Spanish (W/Audio Tape)	$ 21.95
Decimal Dungeon	$ 27.95	Kawai K3 by Dr. T	$ 79.95	Speller Bee	$ 34.95
Digi-Drum	$ 29.95	KCS by Dr. T	$ 174.95	ST-Copy	$ 34.95
DX Patches by Dr. T ..	$ 44.95	Kidtalk	$ 34.95	ST Diagnostics	$ 24.95
DX-Heaven by Dr. T ...	$ 79.95	Kinderama	$ 27.95	ST Sprite Factory	$ 29.95
Eagle's Nest	$ 32.95	K-Resource	$ 44.95	ST-Term	$ 24.95
Easy Draw	$ 64.95	K-Switch by Kuma	$ 27.95	STuff	$ 29.95
EZ-Calc	$ 44.95	Label Master Elite ...	$ 32.95	ST Wars	$ 29.95
EZ-Track ST	$ 44.95	Lurking Horror	$ 29.95	Terrorpods	$ 32.95
F.o.R.e.M. ST	$ 39.95	Marble Madness	$ 29.95	Tracker	$ 29.95
First Cadd	$ 36.95	Mark Williams C	$ 129.95	Trail Blazer	$ 36.95
First Shapes	$ 34.95	Math Wizard	$ 27.95	True Basic	$ 74.95
Flash	$ 27.95	Mathtalk	$ 34.95	VSH Manager-Beckemeyer	$ 29.95

M E G A S T N O W O N D I S P L A Y!

CALL THE CAL COM 24 HOUR BBS (1200/2400 BAUD): 301 681-8933

SUB BATTLE SIMULATOR

20,000 Bytes Under The Sea

Review by Roger Abram

Sub Battle Simulator, by Epyx, is one of those games where you boot up the program, start playing the game, and then all of a sudden you notice that no one else in the house is awake. Two hours have quietly slipped by and it's almost one in the morning. You can either go to bed and get some much needed sleep, or accept another patrol mission to destroy a Japanese convoy. You opt for more patrol duty.

Sub Battle Simulator (SBS), as its name implies, is a submarine war game. What the name doesn't convey is the attention to detail the programmers have built into the software to lure your imagination into the game.

You have the choice of commanding either an American sub in the Pacific or a German U-Boat in the Atlantic. Naturally, if you decide to command a German U-Boat, your mission will be to destroy the ships of the Allied Forces.

The game has three modes of play: Target Practice, Single Mission, or Wartime Command. The first two levels are self-explanatory. The third, Wartime Command, lets you progress through the entire war mission-by-mission until either the war ends or your sub bites the big one. Mercifully, the game has a save feature.

Four distinct levels of play are available in SBS. Level 1 is the easiest and lets you take advantage of the "Navigator" feature. In using the "Navigator," you enter the coordinates of your desired destination in a GEM window and the program will instantly pilot your sub to that location. This feature is not available in the higher levels and you must actually navigate the sub to the coordinates which appeared in your Top Secret orders. Considering that it sometimes takes two to three weeks for a sub to reach its destination, it's wise to use the time compression feature to speed up the trip. At its highest, one second equals four hours. You can also control the time factor to be real time, one second equals five seconds, or one second equals thirty seconds.

The different levels of play also determine whether or not enemy ships and airplanes will be shown on the maps, if airplanes will be able to drop depth charges, how long it takes to reload the deck gun, how long it takes to crash dive, length of damage repair time, enemy ramming intensity, probability of dud torpedoes and ammunition, bombing accuracy of airplanes, weather effects, sea state effects, torpedo range, and overall ability of the enemy.

If you selected Wartime Command, the game begins either in 1939 for the Germans or 1942 if you decide to defend the Red, White, and Blue. If Single Mission is selected, you have the choice of accepting orders in any appropriate year in either theater. A typical order would be the following:

"On 17 January 1942, you will take the S-40 from Surabaya (112 deg East, 6 deg South) and proceed to the Java Sea, off of Balikpapan (117 deg East, 5 deg South). You are to destroy the invasion force coming to capture this important refinery. You should return to Surabaya after patrolling the area for 12 days."

Taken in steps, the first order of business is to get to your destination. If you're playing the game at a higher level, you'll have to determine what course to take and then keep a close eye on your coordinates (shown by pressing the "?" key or bringing up the Status Readout screen). Fortunately, the coordinates for this mission are close enough to the home port to make it a relatively short jaunt.

While at sea, the main screen keeps you informed of the viewing direction, sub heading, speed, depth, power selected (diesel or electric), whether or not the batteries are being charged, time compression selected, periscope height, forward and aft torpedo supply, ammo available for anti-air and deck guns, viewing magnification, and communications from the crew.

The upper right quadrant of the main screen is available to select views or screens, all engaged by pressing either a function key or numbered key. The Periscope View, Binocular View, and Tower View screens let you actually see the size and shape of any approaching enemy vessels. If the seas are rough, all objects roll up and down in these screens. Better have some Dramamine handy. The Sonar and Radar screens are used to track ship movements. The Map Display can show 2000, 1000, 175, 35, or 7 mile areas surrounding your ship. The Side Display lets you view the sub from the outside as you watch enemy ships cruise above you. The Status Readout reports damage information, your coordinates, the amount of fuel, oxygen, and supplies available, radar status, mines and torpedoes remaining, weather and sea state, date, and time.

If the above features aren't enough, you can also send an SOS, radio your position to headquarters, abandon ship (heaven forbid), send a shore party (when instructed to pick up passengers), toggle sound on and off, review your current orders at any time, scan the target book to see silhouettes of enemy ships and airplanes, see how many ships/planes you've downed on your current mission, and visit the Hall of Fame where results of previous missions are stored.

When an enemy ship, airplane, or convoy is spotted, the Battle Stations! alarm is sounded and time compression is automatically reduced. Using the mouse, you can point and click on the view direction gauge to rapidly scan the 360 degrees around the sub. The view can be magnified by a power of seven to increase the likelihood of spotting ships off in the distance. Your viewing direction can also be altered by clicking either the left or right side of the binoculars or periscope.

Once a target is centered in your sights, pressing the "J" key will automatically match the sub heading to the direction in which you are looking. A very handy feature. The Target Data Computer will then display pertinent information on your target -- type of ship, speed, heading, and range. If surfaced, you can click on the deck or anti-air gun indicators to fire a volley at the ship to try to slow it down. A click on the forward or aft torpedo icons will launch one of your precious babies at the target being displayed.

If the object of your desire happens to be an aircraft carrier, or there's one in the convoy, be ready to take on some incoming airplanes. Your only defense against them is the anti-air gun or diving.

Sub Battle Simulator is an excellent game and the first in a promising new series from Epyx called *The Masters Collection* (their next offering will be a tank simulator). It is a well conceived game with few faults. My only complaints are minor -- no submarine engine sounds, some keys have to be held down for more than a light touch to bring up a screen, and the manual has a few discrepancies in player options. *Silent Service*, by Microprose, which I reviewed favorably a year ago, now appears lacking when compared against the more detailed and playable *Sub Battle Simulator*.

[Epyx, Inc., 600 Galveston Dr, P.O. Box 8020, Redwood City, CA 94063. $39.95.]

**********Computer Success !!**********

MODEMS: 100% Hayes Compatible, Free online time and software worth $200, speed selectable, speaker, tone or pulse dial, volume control, auto dial, auto answer, full/half duplex, Bell 103 and 212a,panel lights, 1 year warr.
2400 Baud only $169.99//1200 Baud only $84.99//modem cable only $9.95

5-1/4" Disk Drive- for PC-Ditto- IBM style- by Paradox- allows you to read or write PC disks on your ST, and combined with PC-Ditto available seperately, to make your ST into a PC clone !! DSDS 360K !!
special- only $169.99 !!!!!!!

OTHER SPECIALS:

PC Ditto- $64.95		ATARI 1040ST:	
Panasonic 1080i	157.95	color-	$869.99
Panasonic 1091i	188.95	mono-	$699.99
Star NX-10	159.95	ATARI 520 ST:	
Star NP-10	139.99	color-	$689.99
Magic Sac Plus	105.99	mono-	$499.99

Loaded PC Clones: XT compat,640k,5.5/8 Mhz,clock,cal,color,mono,serial,parallel, MS DOS v3.2,manuals,GW Basic, keyboard, 2-floppys- all for $749.99!!!
HARD DRIVE version of above with 1 floppy, 1- 20meg drive only $999 !

TO ORDER: send check or money order to: Computer Success, PO BOX 3031, Wayland Square, Providence, RI, 02906. Phone 401-751-0038. Master Charge and Visa accepted-but add 5% for bank fee. Add for shipping- modems,disk drives,software-$6, printers-$7, systems-$14
WE WILL BEAT ALL PRICES AND HAVE MANY OTHER ITEMS NOT IN ADD- CALL FOR BEST PRICE !!!! **********

ZOOMRACKS II

A Welcome Upgrade

Review by Tom Richardson

Zoomracks by Quickview Systems, one of the earliest commercial databases released for the ST, introduced a totally new database concept: records represented by a rack of cards. For those familiar with traditional database programs, the documentation and the user interface in the program were not popular. I for one, after trying to learn the program for more than two weeks, finally gave up when more conventional database programs appeared on the market.

Last fall, Quickview responded to the suggestions for improvements by releasing version 2.0 of *Zoomracks* and also an enhanced version called *Zoomracks II*. The literature describing these two upgrades addressed many of the complaints I had when I tried to use it earlier, e.g. no math capabilities, user interface less than friendly, and poor documentation. I decided to give the program one more try, and I am delighted that I did. With *Zoomracks II*, Quickview has a new and innovative program which can easily be adapted to a wide variety of applications.

This review will concentrate on the new capabilities offered in version 2.0 of *Zoomracks*. A full review of the original program can be found in the April, 1986 issue of CURRENT NOTES.

An Easier System

The first obvious enhancement to the new system is a significant improvement in documentation and user aids which together greatly enhance user friendliness. The new and improved manual includes an index to all important terms and, with faults evident in the old version corrected, gives the user a useful reference. The menu, located at the bottom of the screen, occupies more of the screen and shows all available options. A *Zoomracks* template sits above the function keys and shows the commands associated with each function key. The new documentation includes a *Zoomracks* Command Card with a matrix of all commands and their actions. Often, you basically know what you want to do but aren't sure which command or series of commands accomplish the desired action. This Command Card is heaven sent in cases such as this.

Although the program is not GEM based, options can be chosen with the mouse by positioning the cursor over the menu option and pressing the left button. Although the mouse can be used, commands entered via the keyboard soon become second nature. Each time I use this program, I am amazed by the easy flow of the keystrokes. Since the program remembers all keystrokes entered, you can continue entering commands even when the screen is being refreshed. Any command chosen can also be immediately canceled. This helps entice the user to freely explore the system without worrying about making a costly mistake.

Since *Zoomracks* employs a great number of commands, Quickview has thoughtfully provided a command rack which is read into one of the racks when the user presses Shift [F1]. The rack is searched for the command presently highlighted on the menu, and the explanation of the command is shown as a card. By pressing Shift [F1] again, you are returned to your original position. By pressing [F1], you are presented with a Help rack that provides additional information on any command. After only two hours of exploring the various commands available, I felt extremely comfortable using the program. I sometimes wonder if I would have given up the first time around if these options had been available then.

Enhanced Functionality

One of the major complaints about the original system was its lack of any mathematical capabilities. The new version, however, provides addition, subtraction, division, and multiplication functions. You can also sum all the fieldscrolls in a Quickrack or sum all numbers contained within a single fieldscroll. For most applications this capability should be more than sufficient. For example, I was able to create a checkbook rack which keeps a running balance by performing these basic functions.

The sorting capability has been enhanced and now allows you to sort on any defined field contained within the Quickcard. This sort is based on all characters contained within the specified field.

By typing in a Degas filename in a fieldscroll and then pressing Shift [F5], you can view a Degas picture. I'm not sure what type of application would require this feature. This is one option, I suspect, that they could have left out of this package, and few would have complained.

Report Forms

In the course of using a database, different report forms are required for different situations. For example, with a mailing list, you would obviously want to produce mailing labels. At other times, however, you might want to print a list of names and phone numbers. The old *Zoomracks* did not have the ability to produce different report forms. Thankfully, the new program provides multiple report generation. In addition, *Zoomracks II* provides the capability of cutting, copying, and replacing forms. Using this, you could produce a library rack of forms to produce any type of report required for a particular rack of data.

Producing a form is as simple as issuing two commands. The program automatically creates a default report form. You then edit this form to produce the type of report required for the situation. (Since most of the databases I keep require more than one report, this feature is my favorite.) Once finished editing the form, you can display the results to the screen to ensure that your form produces the desired results. You can also use this feature to produce form letters by inserting the form letter into the generated form and placing the fieldscroll names containing the data in the places where desired. Again, with *Zoomracks II*, you could keep a whole library of these form letters.

Macro Capabilities

Since the manipulation of the racks involves a number of keystrokes, a macro capability has been included. This gives you the ability to define a multitude of keystrokes which perform a particular function as a single letter of the alphabet. By pressing the [F7] function key and the alpha key associated with the macro definition, *Zoomracks* automatically carries out the specified keystrokes. Defining these macros is a simple: press Shift [F7] and a letter which will denote the macro name. Then enter the keystrokes required to carry out the given function. Press /[F7] to complete the macro definition. If mistakes occurred during the macro definition, you can go to rack 1 (all macro definitions are automatically stored in rack 1) and edit the fieldscroll which contains the macro definition. Other fields present in rack 1 give you the option of explaining the action performed by the macro. By using this macro function, you can make *Zoomracks* an automated system.

One shortcoming in the macro implementation is the inability to invoke another macro from within a macro. Many common keystrokes are required for similar situations. If you could call a macro from within another macro, you could set up a macro library of commonly used keystrokes rather than having to manually enter the keystrokes required each time a new macro is defined. Perhaps this will be included in a future update.

Search Limits

As with any program, *Zoomracks* does have some limitations. The search function is one of those. The search only provides the user with matches on equality. While this may be ample for most applications, there are times when one wishes to search the database on a range of conditions which usually means that the search criteria is based on inequality conditions (for example, all addresses which are not located in the state of Virginia). To perform this basic function, the user of *Zoomracks* has to go through a series of commands to build a rack of cards to achieve this.

Since *Zoomracks* is not copy protected, it can be installed on a hard drive. Given the capacity of hard drives, data files would logically be stored in a separate folder. Unfortunately, however, *Zoomracks* does not access data files which are not in the main (root) directory.

During the course of this review, I found a few bugs or inconsistencies still present in the program.

* While trying to switch to disk B as the source of my data, I discovered that you cannot select disk B by using the mouse cursor. If you did, the program would read the directory in disk A and place this in the rack containing the filenames. To correct this, press the letter b on the keyboard to read in the correct directory.

* On output forms, you have the option of outputting the date as part of the header or footer. The only trouble is that the date is generated in the form of yy/mm/dd versus the standard mm/dd/yy format.

* The last bug that I discovered occurred while I was trying to copy the template of one rack to another rack. When you copy the template, the program makes a temporary file which it always stores on disk A. The trouble occurs when you are using another disk drive rather than A as your data disk. When you try to copy the file to another empty rack, the program accesses the disk drive which you have indicated as your data disk, producing the response that the program cannot open the file which contains the template. I was able to work around this by switching to disk A as my data disk prior to copying the template to the empty rack.

Although I did encounter these problems, as you can see, the bugs can be worked around rather

easily and thus present no real problems.

Support

The support Quickview provides can only be considered outstanding. When I bought the first version of *Zoomracks*, I was unaware that a problem existed which would cause files to be incorrectly stored. Within two weeks of owning the program, I received a disk in the mail which corrected the problem. I had occasion to call Quickview regarding questions about certain commands. When I called, the receptionist informed me that Paul Heckel (the designer of *Zoomracks*) was on the phone and if I would leave my name and phone number he would get back in touch with me once he finished his conversation. I gave my phone number and was resigned to the fact that I would never hear anything from him. Low and behold, within 10 minutes I received a phone call and approximately 10 minutes of help before he had to leave to go to a meeting.

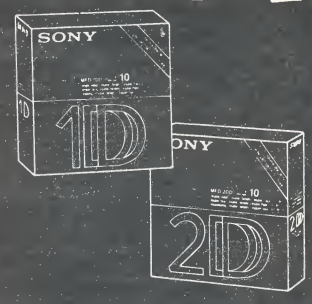
Starter Kits

Since a picture is worth a thousand words, Quickview offers starter kits which provide a series of racks for many sundry applications. Presently the *Home Starter Kit* and *Business Starter Kit* are available. Each contains approximately 35 templates, each of which has its own output form. Macros are provided in order to perform certain operations with certain templates. Each of these templates may be modified in order to adapt it to a user's application. While some of the templates provided were less useful (family contracts that keep track of what the kids agreed to, for example), there are a number which could be expanded to meet the needs of most individuals.

Quickview promises that additional starter kits (dealing with areas such as Sales, Academic, School, and others) will be released. With these kits, Quickview is building up a base of applications which can be used by anybody who has a need to use a database system. This is the type of support that one only hopes to receive from a publisher once they purchase their program. All in all, company support is outstanding for this product.

In conclusion, while *Zoomracks II* is not a full-featured database, the capabilities it provides offer most users all the features they need. While the price seems a bit excessive (Zoomrack I - $79.95 and Zoomrack II - 149.95) when compared to other database programs, the performance of the program along with the support provided makes this program a useful addition to many program libraries.

SONY® 3½ DISKS



3½ SS/DD $13.95 BX

3½ DS/DD $18.95 BX

ROCK BOTTOM PRICES !

OHIO RESIDENTS ADD 5.5% STATE TAX

D&P COMPUTER
P.O. BOX 811
ELYRIA, OHIO44036

PH (216) 926-3842

9 AM - 6 PM MONDAY THRU SATURDAY

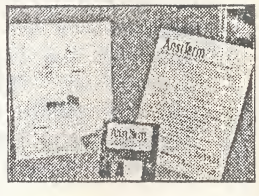
AnsiTerm

The only multitasking terminal emulator for the Atari ST.

Now you no longer have to wait for those long downloads to finish. With AnsiTerm you can start an operation, and still use your computer to edit, print, or perform other tasks.

You could pay more for a communications package, but why? Compare these features:

- Full GEM interface.
- ANSI X3.64 (VT100, VT102), with UK and graphic fonts, underline, bold, blink, reverse-video, VT100 or VT52 keypad, VT52 emulation, and more.
- Extensive file transfer system offering KERMIT, XMODEM, Compuserve 'B', and ASCII protocols.
- "Hot Key" and GEM Menu toggle between host session and Micro C-Shell*.
- Fully multitasking — download while you keep working.
- Flash compatible "script" files and "macros".
- Programmable function keys.
- NOT COPY PROTECTED.



$24.95

Beckemeyer Development Tools Phone (415) 452-1129 BBS (415) 452-4792

As easily as 1, 2, 3- your work can look like it was typeset !

It's true. CACI's laser imaging service gives your copy the look of professional typesetting for about as much effort as it takes to use your dot matrix printer. Here's how it works.

First, use your ATARI ST® with Publishing Partner™ to create your material. Create anything from a single advertisement to an entire book with text and graphics.

Second, bring your disk to CACI Graphics Services. Tell us whether you want your output on film or resin-coated paper, and give us about 24 hours to print.

Third, pick up your typeset-quality copy.

Now that's as easy as 1, 2, 3 !

Simply prepare your document using Publishing Partner for final layout, decide on Linotronic or Laserwriter output, and call CACI Graphics Services for production.

Of course the secret is in the 24 hours you give us. During that time, CACI images your copy using our Linotronic 300™ Lasersetter from Allied. The Linotronic is a remarkable new laser printer whose resolution is unequaled. You can see for yourself how good it is by inspecting any part of this ad.

But if you're still not sure laser imaging is as easy as we say, give us a call. We'll be happy to answer all your questions and offer some tips on getting started. We'll even send you our free 1-2-3 brochure with its striking comparisons of dot matrix, laserwriter, and laser imaging.

So don't settle for chunky dot matrix or pay for expensive typesetting. CACI can improve your image overnight -- as easily as 1, 2, 3 !

CACI
Graphics Services
8260 Willow Oaks Corporate Drive
Fairfax, Virginia 22031
(703)876-2231

Atari ST is a trademark of Atari Corporation, Publishing Partner is a trademark of Soft Logik, Linotronic is a trademark of Allied Corporation

SOLAPAK

RAM Disk, Print Spooler, Screen Saver, and Auto Loader

Review by Stephen D. Eitelman

The March 1987 issue of *Current Notes* contained an article entitled "An Update on ST Ramdisks" that included a commercially available RAM disk in the discussion. What that article neglected to do was review the entire software package from which the RAM disk was taken. This package is called *SolaPak* and is produced by Solar Powered Software in Chandler, Arizona. In this article, we examine the entire package.

SolaPak consists of four utilities: a print spooler, a RAM disk, a screen saver, and an automatic RAM disk loader. With the exception of the screen saver (a short program to turn off the screen when the keyboard has not been used for a few minutes), these utilities are available in the public domain. Why then would one want to spend $30 for a commercial package?

The answer has several parts. First of all, this package works well. I found no real bugs, although there are two minor blunders in the documentation. Second, the documentation that accompanies SolaPak on the disk is excellent. Third, this package is as flexible as I could imagine. It can be configured for any printer, all sorts of preset configurations are possible, it can be run as an accessory or from a .PRG file, and any of the four utilities that are not desired can be left out.

Version 2.0 of *SolaPak* is available now. The author is in the process of a rather extensive update that will make the RAM disk reset-tolerant and add a host of new features. It may be available by the time you read this (my estimate). I tried the beta version of the reset-tolerant RAM disk and found that it is indeed reset-tolerant.

Major Features

RAM DISK. The RAM disk is a portion of the ST's memory that is set aside and configured to act as if it were a disk drive. This particular RAM disk is not reset-tolerant. Its contents are lost upon reset or resolution change. It is compatible with the hard disk and is adjustable in size. Since it is entirely electronic, it is very fast and there is no wear and tear on the actual mechanical disk drives. This is very advantageous in situations requiring frequent access to the disk drive; compiler usage is probably the most common, but I also use RAM disks for writing articles such as this one where there is a lot of saving the document and then going back to "improve" it.

PRINT SPOOLER. The print spooler uses the RAM disk for storing a document prior to printing it. The reason for doing this is to free up the computer (actually, time sharing it) for other tasks during the printing process. This is particularly valuable for printing long documents on a slow printer. For example, I have a daisy wheel printer that, while it produces high quality output, is very slow -- my old Juki 6100 lumbers along at about 10 characters per second. That is S-L-O-O-O-W. With the print spooler, I can be printing out one document while simultaneously using the computer for another task.

Although *SolaPak* uses the RAM disk to store documents for the print spooler as well as other files, these other files can be manipulated independently of the documents to be printed. I found this to be surprisingly sophisticated and I rather suspected that it would be subject to crashes. Try as I might, however, I never made the RAM disk or the print spooler bomb. This is as bullet proof a program as I have seen.

SCREEN SAVER. The screen saver blanks out the screen when there is no keyboard input after a few minutes (time selectable during installation). It is alleged that this saves the picture tube from getting an image "burned" into it by having the same image present for a long time. There is some quarrel about this. While the screen blanker works fine, I am not convinced it is really necessary. In medium resolution, there are 320 by 200 pixels. That means that in each screen there are 64,000 pixels for the electron beam to sweep over. That means that each pixel only gets illuminated for a maximum of 1/64000th of the time. That is not very often and I doubt that the screen will ever get an image burned into it. But the stories of burned screens persist and BBS operators are particularly concerned since hours can go by with no change in the screen image. Personally, I don't like the screen saver: it startles me when it blinks off and then periodically flashes on to remind me that the computer is still on. That's a lot of light flashing on and off and it is tough on my poor old frayed nerves! But it can be easily

removed during the installation process. It can also be toggled on and off from the dialog box that comes up when the spooler is accessed if it has been set to ON in the DEFAULTS file.

AUTO LOADER. The auto loader, COPY2RAM, is the most versatile one that I have seen. Any file from any folder on any drive can be copied to the RAM disk into any folder or the root directory. No other auto loader that I am aware of permits this degree of flexibility. There have been a number of occasions when I wanted files from folders on the hard disk loaded into the root directory of the RAM disk, so I find this a very useful feature.

The entire program is written in machine language and the author has optimized the code for speed and small size. The result is the fastest RAM disk I have encountered, although at the blazing speeds of any RAM disk, this is probably splitting hairs.

Documentation

The disk comes with a manual on it that is 31 pages long. For what is conceptually a simple utility, this is a great deal of documentation. It is extremely complete, including sections at the beginning on how to copy files, disks, and folders and how to format disks. For the beginner, this documentation is a real blessing. I did find, however, that the installation portion tended to be intimidating because there is just so much of it. But the actual job of installing the print spooler is no worse than generating a printer driver for a word processor -- in fact, it is a very analogous procedure and once started, I felt very comfortable. There is also a quick installation section for those impatient to get started.

The installation procedure consists essentially of modifying a file called DEFAULTS.DEF for your particular printer. There are a number of sample files already included for the more popular printers. As usual, mine was not included. I found that I could make major changes to the defaults file, including changing the kinds and order of features (such as bold, superscript, etc.).

Problems

As I said earlier, I did not find any real bugs and the program never crashed for me. I do, however, have some complaints. The manual says that ASCII files are required for the print spooler and that *ST Writer* and *1ST Word* must employ special procedures to create such files. That much is correct. However, the special escape codes for style, format and print enhancements such as bold, superscript, etc. are lost when these procedures are employed. What the author fails to tell the reader is that *ST Writer* (ver. 1.50 and above) should use the PRINT TO SPOOLER function before activating the spooler. This will retain all the escape codes. Creating an ASCII file with *1ST Word* by toggling off the Word Processor mode will cause the loss of the special escape codes. I never did find a way to print bold, superscript, etc. with *1ST Word*. In discussions with the author, I learned that the next upgrade of *SolaPak* will solve this problem.

Conclusions

SolaPak is a fine, versatile, easily personalized print spooler, RAM disk, screen blanker and auto loader that works very well. In my judgement, it is well worth the price tag for those of us with slow printers who have occasion to print out long files. I have found it particularly useful when printing out CompuServ HealthNet files that tend to be rather long. Future versions of *SolaPak* appear to be on the horizon and should provide significant enhancements.

ProCopy ST BACKUP UTILITY

You can't backup your software because copy protection locks you out. **ProCopy** is the key!

- Protects against the accidental loss of expensive software
- Works with all Atari STs
- Copies both S/S & D/S disks
- Use with 1 or 2 disk drives
- Not copy protected
- **FREE** shipping and handling
- **TOLL-FREE** telephone number
- Updates are only $12 with return
- Orders shipped same day
- Disk analyze function included

Dealer Inquiries Welcome

VISA MasterCard and C.O.D. orders

$34.95

Call (800) 843-1223

Send check for $34.95 (overseas add $2.00 for air mail) to:

PROCO PRODUCTS

P.O. BOX 665, CHEPACHET, RHODE ISLAND 02814 USA
(401) 568-8459

Available Internationally in Europe and Australasia

THE MOVING FINGER CO.
Building 2
Shamrock Quay
Southampton, SO1-1QL
England
Tel. 0703-227274

TECH-SOFT
COMPUTER WHOLESALE
324 Stirling Highway
Claremont
Western Australia 6010
Tel. 09-385-1885

ATHENA II C.A.D.

A Two-Dimensional Design Package for Computer Aided Design

Review by Robert L. Fernandez

CAD systems are graphic-object generating systems with associative "intelligence". That is, the objects created have, among other things, dimensional and coordinate data related to them, e.g. starting point, end point, and length of a line and type of line (dash, center). These systems also give a user the ability to manipulate, store, and retrieve any of the objects created.

Ever since I purchased an Atari 1040 ST, my search for a useful and productive CAD package that would allow the maximizing of my investment has been my number one priority. I wanted a software package that took advantage of the GEM interface and allowed for the graceful and easy creation, placement, and manipulation of graphic objects.

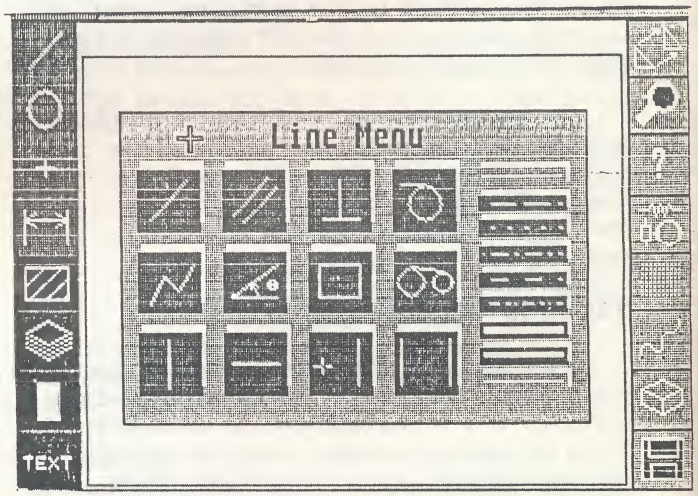
While reading one of the many computer publications I subscribe to, I happened to spot an ad for another CAD package that runs on the ST. Impressive specifications, a call to the vendor, and a dry run at my favorite computer store, indicated this package is worth the investment. Here are my initial findings on *Athena II* from Iliad Software.

Installation of *Athena II* on the ST is straight forward, and the documentation easy to follow. The authors take you through an initial tutorial to create your first part, including how to load the package on floppy system or a hard disk. After the CAD package loads, you are greeted by a screen bounded on either side by eight main menu buttons. Selecting (with the left mouse button - LMB) on any of the 16 main menu buttons brings up a menu for the specified object creation, manipulation, or drawing management command. For this review, I have divided the menu buttons into three categories: Object creation, Object manipulation / View Control, and Drawing Management.

Object Creation

Athena II objects are lines, circles (arcs, ellipses, and fillets), points, text, dimensions, and B-Splines. Each one of the objects can be created by digitizing locations in the drawing window with either the LMB or an x-y coordinate specification from the keyboard.

Placement of single lines require two points which can be manually input, x-y coordinate pairs, digitized points, or snapped to a grid spacing/dimension of your choice. Additionally you have line constructs for parallel, perpendicular, tangential, horizontal, and vertical. As you can see there is some flexibility in these capabilities which are shared by the other object generation menus.



One of the most important capabilities of a CAD system is the generation of dimensional and text information. This is one of the areas where I feel *Athena II* has an edge over other systems for the ST. In addition to horizontal and vertical dimensions, you also have chaining and base line capabilities which are critical for mechanical as well as electrical and architectural applications. Arrow heads and text size are adjustable/editable which make for better view organization.

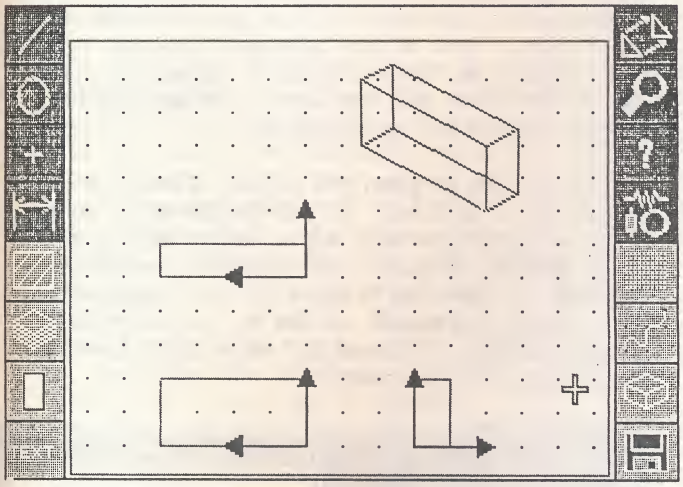
Object Manipulation

Athena II object manipulation includes area fill, erase, transformation, isometrics, and magnify. These menu buttons give you the ability to fine tune your design work. The most impressive of these is the transformation menu which has a trim feature that is comparable to that found on larger systems. I found trim to work equally well on lines and arcs. The implementation of this function can also be seen when using the fillet command in the circles menu, which has to trim two lines and then add an arc tangent to both lines at a specified radius. The intersection of the objects is clean and joined exactly, even when zoomed in at a high magnification.

Also available in this menu are move, copy, mirror and scaling of objects which at times can

be difficult to use. Inability of the system to allow one to snap to some portion of an object, when asked to select the origin of the object and its destination, plays havoc in accurately using these commands.

When using the erase menu, you get a feeling for an object oriented system, as one must select the object type to be erased (line, circle, arc). Then LMB on all objects of that type until Right Mouse Button (RMB) indicates you have finished your selections. This would be an ideal place to have an inclusive/overlap window selection capability (which should be available in rev. 1.80).



The isometric menu takes some getting used to, but with a little practice one can become proficient in its use. After creating the front-top-right views of a part, selecting the isometric menu gives you the options to pick the x-y-z planes of the part and project the planes to an isometric view which gives the impression of a three-dimensional object.

Drawing Management

Drawing management is an important aspect of any CAD system, there are no disappointments in this area of *Athena II*. The management menus are: layers, grids, parts, information, and files.

Athena II supports 256 layers which can be selected through a matrix of squares 16x16 labeled A - P. There are two windows of matrixes, a matrix for selecting active layers with one layer current. The other matrix is for visibility of layers and what color will be used in object placements. This layering gives a user the freedom to place text, dimensions, and objects on different layers for better drawing control/management. Users should be aware that layer invisibility does not mean the layer is not active, editing processes could affect information that can not be seen.

The parts menus gives one the ability to create libraries of parts for re-use from project to project. This is an excellent feature of any CAD system, and is implemented and supported on *Athena II*. When a user registers with Iliad, they will receive a library of architectural parts/symbols. These parts include: climate control, doors, electric, kitchen, markers, plumbing, textures, and trees. Not having to "re-invent the wheel" is where users will find the biggest productivity gains and return on investment in a CAD system. The parts can be inserted anywhere in the drawing and manipulated with any command we have discussed (scale, copy, move ...).

Recommendations

I have highlighted those parts of *Athena II* that convinced me to invest in the package. However, there are still areas that need improvement in the line placement and transformation menus. For example, it is frustrating to try and place a line without being able to snap to an existing object, or having a relative command (delta-x or delta-y) to extend lines during manual input. (You must use coordinate x,y pairs based on a 0,0 location.) Equally frustrating is trying to accurately copy, move, or mirror objects without the ability to snap to an object, or place it at a relative distance from its origin.

As with any system one uses and becomes accustomed to, "workarounds" start becoming apparent as we get used to the new tools available us. The major problem here is that one must take time and think about how they want to accomplish certain tasks.

The system requires 1 meg of memory and will operate on either a monochrome or a color monitor. In my discussions with the vendors of this package, it became apparent that they were looking to improve it in many ways. The initial version of the software only supported *Athena II* files and GEM metafiles. A test version that was sent to me for evaluation contained support for output to NEO and DEGAS files. Future file types to be supported will be DXF (for AUTOCAD),and Generic (for GENERIC CAD). These I am told will be released as separate conversion packages. They are also planning on supporting one of the versions of IGES, but this is not a high priority at the moment. Power for the price is not a myth, *Athena II* retails for $99.95.

While there are other programs coming on line, e.g. *M-CAD* and *DRAFIX*, which may have smoother interfaces, I would recommend this package to anyone wanting to get into CAD or with CAD experience. I don't think you will be disappointed.

TUNEUP!

A Hard Disk Optimizer

Review by Jeff Greenblatt

Since I recently purchased a Supra 20 meg hard disk, I didn't think I would need a program such as *TuneUp!*, but I was wrong.

When you first purchase a hard disk, the first thing you do after partitioning it is to load it up with all your favorite programs. When it's new, all free space and the programs in each partition are contiguous. It's a real joy to use; it's lightning fast. However, as you create and delete files, the area to which you write files becomes fragmented and the hard disk begins to loose its speed. Files or even programs become scattered all over the drum and this reduces the performance of the hard disk.

Normally, the way to cure this problem is to backup the hard disk onto floppies, reformat the partition, and load everything back in. All the files, programs and free space becomes contiguous again. Obviously, this is a time consuming effort and a real pain. Most hard disk owners probably wouldn't bother to do it. Now, however, there is an alternative, *TuneUp!* to the rescue.

TuneUp! offers seven functions to the user. The first two are the primary reasons for its use; providing contiguous files and free space. *TuneUp!* provides two options to accomplish this through optimal location algorithms.

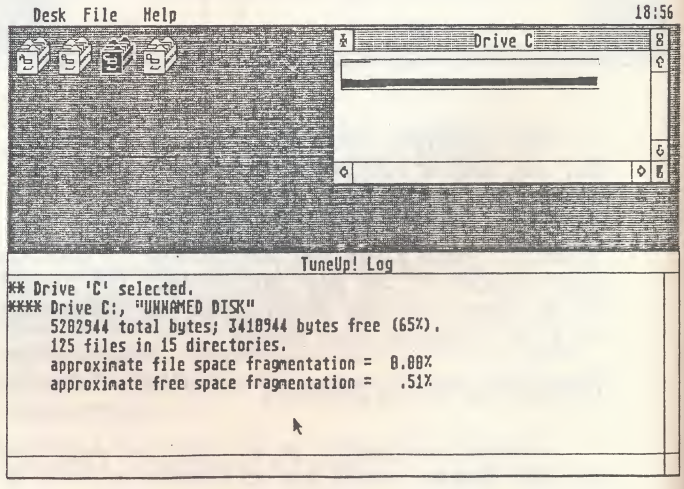
The first option offers the user a chance to optimize for read access. According to the manual, "if optimizing for read access is selected, files are placed at the bottom of the disk partition, and free space is placed at the top. This minimizes head movement when reading existing files".

The second option offers the user to optimize for write access (the manual says read/write). This option apparently does the same thing as the first if the manual is written correctly. The manual changes terminology on the reader, see for yourself: "In this case free space is moved towards the beginning of the disk, and the files are moved towards the end".

Notice that top/beginning and bottom/end are used to describe the locations in the partition. What's the difference??? Don't both of these statements say the same thing!! More on this later.

When *TuneUp!* is booted up, it checks which disk drives are active and brings up a screen with disk icons in the upper right hand corner and a log window (movable) which consumes approximately one-third of the lower portion of the screen. Most of the messages are displayed and recorded in the log window. Using the slide bar on the side, you can scroll through all the messages given during a session.

To use the program you either click once or twice on a disk icon. If you double-click on an icon, a new window will pop up which will give you a graphic display that indicates how blocks are used on the disk (figure 1). No explanation is given in the manual on how to interpret this graphic display. Presumably, the solid lines are the blocks that are used.



After you click once on an icon you can pull the file menu bar down which offers the following:

Print Log Window
Print Disk Contents
Disk Statistics
List Contents
Check Disk Structure
Optimize for Reading
Optimize for Writing

Print Log Window does just that, it send all recorded messages during a session to your printer.

Print Disk Contents sends the directory of the selected disk to your printer.

Disk Statistics will display information about the disk in the window -- the size of the disk and the percentage of fragmentation.

List Contents creates a scrollable window which lists the directory of the disk to the screen. After performing this operation, you can double-click on any file in the window and a new window will appear which will give you a graphic display which shows the blocks used for the file on the disk.

Check Disk Structure checks all files on the selected drive for consistency and displays the results in the log window. If errors are found a dialog box will be displayed which will offer some options to the user; one of which is to Abort the operation. If it finds an error that can be corrected, a fix errors button will be enabled. Additionally, two other buttons allow the user to display the error messages in the log window or to a printer. The manual points out that *TuneUp!* will try to correct orphaned files by restoring the pointers of the file in the root directory. In my use of *TuneUp!*, I didn't encounter any error problems with my files, so I can't report on the performance of this feature.

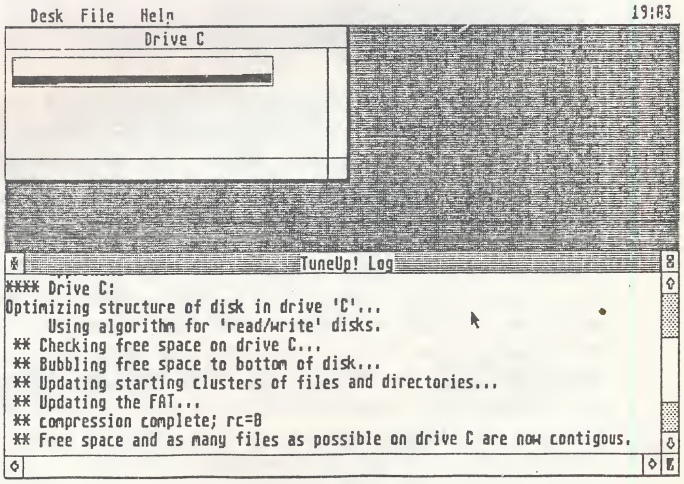
Optimize for... options are the main functions of *TuneUp!* mentioned earlier. I used *TuneUp!* on my two-week-old hard disk and was surprised to find that the "C" partition was fragmented. At this point I had to make a decision on which of the optimize functions to perform. The manual doesn't make any recommendations on which to use, although it did state that if I used "Optimize for Write", my permanent files would become less fragmented. I decided to "Optimize for Write" and the process took less than a minute (see figure 2 for the log window). Notice what it says in the "Bubbling..." message, it contradicts the statement that "free space will be at the beginning of the disk". Confusing, isn't it!!! It did work though, when I double-clicked on the drive C icon the graphic display didn't have any gaps in it (figure 2). But I'm still confused. If the solid line in figure 2 is my files, is all the free space above the solid line? If it is, then the manual is correct and the message in the log window is wrong.

TuneUp! does have some limitations and the manual does give the user a list of precautions. Some of the most disastrous things that could happen during the optimization process are: (1) the power fails, (2) somehow the reset button is pressed, (3) the computer is turned off, or (4) the system could crash.

The manual points out that if any of these events occur, the worst that could happen is that only one file in most cases will be lost, (but could be recovered with a disk editor). It would be wise to backup important files before using *TuneUp!*, and the manual recommends this. Another limitation is that *TuneUp!* works best when the free space is equal to or greater than the largest fragmented file on the disk. If not, then *TuneUp!* will check to see if the file will fit in memory and proceed if it can. In this method, the file is erased from the disk to relocate it contiguously.

One annoying feature was the close window button in the log window. If you click on it, you exit back to the desktop. There is also no way to clear the log window of text without quitting the program.

Although the manual doesn't address floppy disks, I couldn't resist testing *TuneUp!* on one. As you may have noticed in figure 2, the icons for drives A and B are there. To my surprise all of its features except for the Optimize for... features worked on a backup copy of my favorite utility disk which I have been adding and deleting files to for over a year. It did show me that the disk was highly fragmented. When you have been spoiled by the speed of a hard disk, you come to appreciate any increase in speed of a floppy. It's time to format a new floppy and copy these files to it.



All in all, I really think *TuneUp!* is a fine utility. I highly recommend it. Anyone with a hard disk should be using it for housekeeping on a regular basis. The documentation could be a bit better, but the program is a GEM. *TuneUp!* is not copy protected, so you can keep a copy of it on your hard disk.

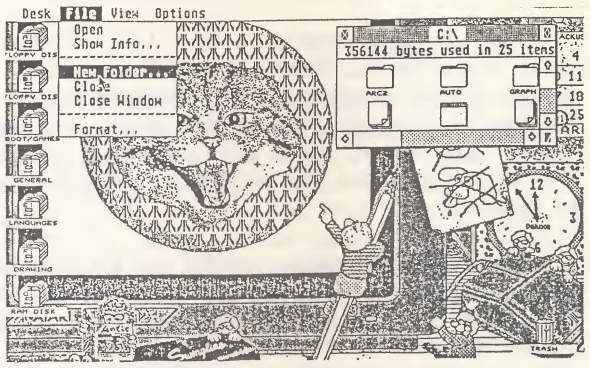
[*TuneUp!*, MichTron Inc., 576 S. Telegraph, Pontiac, Michigan, (313) 334-5700 $49.95]

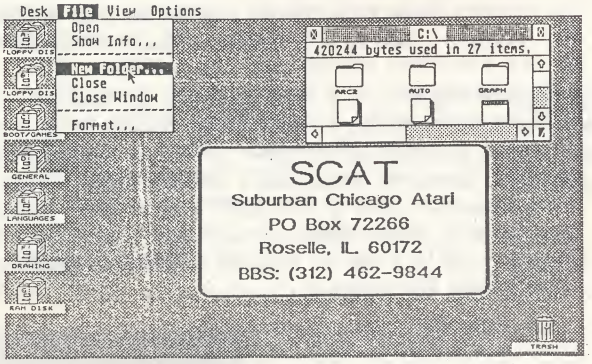
EASEL/ST

A Fun Utility

Review by Kirk Osterman

Computer Fenestrations has just released a nifty new utility. Its called *EASEL/ST* and it lets you install any Degas or NeoChrome picture as the background of your desktop. To use the program simply place it in an auto folder along with a copy of your favorite art work in the root directory. The picture will have to be re-named to "Easelst" so that the program knows which picture to load. That's it. Now, whenever you boot that disk the picture will be there on your desk, but every thing else will be the same. Click on the disk drive icon and open a window on top of the picture, execute a program, and return to the desktop and your art work will still be there.





Right about now you're probably thinking to yourself that this sounds nice, but not very practical. Well, actually there are quite a few ideas to put this program to work for you. How about drawing up your users' group logo. Then at the next meting instead of staring at a dull green or grey screen between demonstrations you can promote your next meeting time. Another idea would be to make a picture that describes what's on a particular disk along with any special instructions. By doing this even someone who may not be terribly experienced with the ST could get started by simply booting up the computer and reading the text on the desktop. Other possibilities include company logos, clip art, or just your favorite painting.

I've tested Easel/ST with quite a few popular ST programs and have found none to date that have problems with this program. It should be noted that programs like Easy Draw and VIP Professional have the desktop in the background of the program so what ever picture was installed will still be there when you execute programs like these. This could lead to innovative uses of Easel/ST that are application specific. You can probably tell I like this program and at least one reason for this is that it falls into a rare class of programs that do what they're supposed to. It is not copy protected, and is reasonably priced. At only $19, this program makes a fine addition to anyone's library.

dis cache™
DISK ENHANCER

FAST..... Up to 20 times faster than normal drive.
VERSATILE.....Works on both floppy and hard drive systems.
SAFE TO USE...Write-thru cache so no danger of losing data.
EASY SETUP.....Includes GEM configuration program.
FLEXIBLE.....Options allow customization for any system.
PRACTICAL.....Reduces wear on drives in several ways.
COMPATIBLE.....Transparent to most software.

$29.95
PLUS $2.00 POSTAGE & HANDLING
MARYLAND RESIDENTS PLEASE ADD 5% SALES TAX
DEALER INQUIRIES WELCOME

Amgem, Incorporated
Post Office Box 1338
Bethesda, Maryland 20817
(301) 762-8870

THE ELECTRONIC CLINIC

4916 Del Ray Ave. Bethesda, MD 20814

(301) 656-7983

ATARI ST COMPUTERS AND ACCESSORIES	
1040 COLOR SYSTEM	899.95
1040 MONOCHROME SYSTEM	749.95
520 COLOR SYSTEM	749.95
520 MONOCHROME SYSTEM	499.95
SF314 720K DISK DRIVE	224.95
SF354 360K DISK DRIVE	149.95
SHD204 20 MEG HARD DISK DRIVE	599.95
INTERNAL CLOCK/CALENDAR w/CAPS LED	49.95
ST COMPOSITE MONITOR CABLES	19.95
520ST MEMORY UPGRADES TO 1 MEG	170.00
UPGRADES TO 2.5 MEG	499.00
UPGRADES TO 4 MEG	799.00
520ST MEMORY UPGRADE BOARD OK RAM USE WITH 256K or 1 MEG CHIPS	150.00
ST/IBM PRINTER OR MODEM CABLE	17.50
ST MOUSE	60.00
520 POWER SUPPLY w/o TRADE	90.00
w/ TRADE	65.00
ST DRIVE SUPPLY w/o TRADE	75.00
w/ TRADE	60.00
ST 6' DISK DRIVE CABLES	19.95
ST 13 PIN MONITOR PLUGS	5.50
MOUSE MATS FOR ST MOUSE	9.95
COVERS FOR 1040ST	9.95

ATARI 8-BIT COMPUTERS AND ACCESSORIES	
65 XE COMPUTER	CALL
130 XE COMPUTER	CALL
1027 PRINTER	CALL
1802 COLOR MONITOR	229.95
XETEC GRAPHIC PRINTER INTERFACE	59.95
800/XL/XE/1050 POWER SUPPLIES	25.00
ATARI 6' DISK DRIVE CABLE	12.00
ATARI COMPOSITE MONITOR CABLE	10.00
850 PRINTER OR MODEM CABLE	14.95
5200 JOYSTICKS	32.00
2600 POWER SUPPLIES	12.00
COVERS FOR 800XL, 130XE, 1050	8.95

OTHER PRODUCTS AND ACCESSORIES		
MONITOR SWIVEL STANDS		22.50
6 OUTLET SURGE PROTECTOR W/BREAKER		24.50
A/B SWITCH BOXES PARALLEL or SERIAL		49.95
3.5" DISKETTES CASES	HOLDS 26	12.99
	HOLDS 50	19.99
5.25" DISKETTE CASES	HOLDS 100	19.99
3.5" TDK DISKETTES	10 FOR	15.00
5.25" NASHUA DISKETTES	10 FOR	7.50
5.25" "AT" DISKETTES	10 FOR	26.50
COMPUTER PAPER 9.5" x 11" CONTINUOUS FEED, SMOOTH EDGE	2500 SHEETS	29.50

PANASONIC PRINTERS		
KX-P1080i	120 C.P.S. DOT MATRIX	224.95
KX-P1092i	180 C.P.S.	399.95
KX-P1592	180 C.P.S. Wide Carriage	499.95
KX-P1595	240 C.P.S. " " "	699.95
KX-P3131	LETTER QUALITY	299.95
KX-P3151	" " " "	499.95

The Electronic Clinic is a completely bonded, licensed, and insured repair shop that has been serving the Washington Metropolitan area since 1969.

We are an ATARI factory repair center. Professional service on: Astra, Indus, Rana, and Trak disk drives. Epson and Panasonic printers, most brands of monitors.

*** ALL SOFTWARE AT LEAST 15-25 % OFF ***

We stock the entire CURRENT NOTES ST Public Domain Library. $4.00 Per Disk

All prices listed are good for these months only with this ad. No photocopies. Some items may be in limited quantities. Prices are subject to change. Call to inquire about any product listed.

PC COMPATIBLE SYSTEMS
640K PC/XT COMPATIBLE
4.77/8.0 MHz TURBO BOARD
2 DRIVES, AT STYLE KEYBOARD
PARALLEL, SERIAL, GAME PORTS
CLOCK, CALENDAR, 150W SUPPLY
COLOR OR MONOCHROME VIDEO CARD
F.C.C. APPROVED, 6 MONTH WARR.

FULLY ASSEMBLED & TESTED $725.00
MONOCHROME TTL MONITOR $149.95

We offer COMPLETE sales and service on IBM PC's, XT's, AT's and compatibles.

CURRENT NOTES PC-386 SPECIAL
80386 IBM AT COMPATIBLE 16 MHz SYSTEM
COMPLETE $1999.95

Call for price on custom assembled systems. You tell us what you want and we will build it to your specifications.

We accept govt. & school purchase orders.

SPRITES ON THE ST

Pro Sprite Designer ... ST Sprite Factory

Review by Bill Moes

When the ST was first announced, some Atari fans wondered how animation was going to be accomplished. (Remember those days of confusion?) The 8-bit Ataris, such as the 800 and XL, had player-missile graphics and character set animation. Those were sophisticated hardware solutions and there was reasonably easy access for programmers of almost any ability level. Nothing similar was available on the ST. And the languages bundled, ST BASIC and Logo, certainly did little to encourage the hobbyist programmer.

It's all come a long way. Today, many languages are available, most having several versions from which to choose. Programmers, regardless of interest, have a heady selection. While the ST does not support what we traditionally refer to as "sprites", or player-missile graphics, the combination of hardware speed and standard raster graphics can accomplish something very similar. So we'll call them sprites anyway. And, to help that combination along, animation tools are now being offered to supplement the languages.

PRO SPRITE DESIGNER

Pro Sprite Designer (PSD) allows you to create sprites on the ST's low resolution screen and put those sprites into a sequence for animation. The package includes suggestions for including those images with four languages: ST BASIC, Fast BASIC, C, and Assembly.

The tools used to create the designs are sufficient, although little more than that. You'll design the sprite on a 32 X 22 grid, an easily used 8X magnified version of the actual shape that is shown in a small box on the screen's upper right corner. The mouse is used to draw free-hand, with the 16 colors displayed across the top. The image can be shifted, one pixel at a time, in one of the four edge directions. Frames can be flipped horizontally or vertically. Individual frames, as well as complete sequences, can be cleared. You can do a transparent or solid copy from one frame to another, or swap two frames. You can also combine two frames for a 32 X 44 pixel image.

After you've completed an animation sequence, you'll want to see how it looks in motion. Begin by selecting a numbered first and last frame for the sequence. While you can view a sequence beginning and ending with any numbered frame, all sprite sequences will be SAVEd starting with the "0" frame.

After you've marked the sequence, click on the "M" and the design grid will be replaced by a blank area for viewing the Movement. Choose one of the four directions and click for the play. The speed can be adjusted and you can loop the animation repeatedly.

PSD does not use GEM. Instead, the author, F. Rawasi, has used VCR-style icons. They are logically chosen and easily remembered. I enyed seeing some of the special touches included: the movement screen falls like a window shade over the design grid ... the upper and lower sections of the disk access screen unroll to meet in the middle as they fill that same area ... a lock-out panel can drop over the icon controls if you're leaving the computer awhile. Stylish.

Unfortunately, originality can also get in the way. Examples: the unusual RGB dials turn in only one direction, so if you go past the number in selecting a color, you'll cycle through the 0-7 again ... when loading a sprite file, you'll do three separate clicks on three separate parts of the screen (filename, Load, Yes) with no fast double-click.

There is no way to use these sprite files in a stand-alone program without first including them within an actual language. Short example programs are on the disk for ST BASIC and Fast BASIC. The example for each BASIC uses a sprite file from the disk and a sprite handling program also on the disk. The sprite handler is a machine code program to enable you to move the sprites. Both that sprite handler and the actual sprite file are BLOADed by the main BASIC program. A two-frame animated sprite is then bounced around the screen. There is some minimal screen flicker in BASIC, but nothing serious. If you're an intermediate-to-advanced BASIC programmer, the demo should be enough to get you going. (Fast BASIC is cartridge-based and, like *PSD*, is from England. Although reported to be quite powerful, it has not yet gained great popularity in the U.S. Fast BASIC ($141.00) is currently available from ScanAm, 10 Garber Sq., Ridgewood, NJ 07450 (800) 524-0484.)

The source code for the sprite handler is also on the disk. Assembly language programmers could INCLUDE this, as well as the sprite data, in their programs. Programmers in C would probably need to edit this file so it would meet the linking needs of the specific version of C being used.

Another way of using sprites within your program is with the data converter utility, also on the disk. The data converter takes a sprite file as saved from the main program and outputs a file for one of the languages to use directly. BASIC's output is a series of DATA statements. For C, a series of INT arrays will be supplied. And for Assembler, a set of data definition statements is listed. These files contain numbers for the palette and for each sprite frame. The documentation does little other than to offer very general information on using the files in your own programs.

Several sprite files are on the disk, so you can take a look at some demos. The documentation for *PSD* is a small (3" X 5") booklet of 60 pages. The booklet's first half explains how to use the software. The second half gives general instructions for using the sprite data within the four supported languages. The list price for this package is $59.95. That seems a bit high, maybe $20 too much. A demo disk ($5) is available from Eidersoft, the U.S. distributor. Don't waste your money. It only shows a four-cylinder engine, with pistons, valves, and plugs doing what they do. While it is interesting to see multiple sprites used in a single image, that demo has no view of the program's work screen.

PSD is copy protected and I see this as a negative for a programmer's utility. It uses the key-disk method, although the software doesn't do an automatic check for that key disk with two drives. You need to press a key to indicate you've put the master disk in the proper drive and another press to indicate you've taken it out.

Summary: *Pro Sprite Designer* is a package easily used to create sprites and to develop animation sequences of up to 1040 frames on a standard 520 ST, up to 2500 frames on a 1-meg ST. The few tools available are enough to help you get the job done and the package offers a couple of methods to use the sprites within a program, although you will need to be knowledgeable about your programming language. The documentation is minimal, some popular languages are not directly supported, the price seems high, and the copy protection doesn't help. But this program does what it claims. *Pro Sprite Designer* eases the task as you move motion from the mind to the monitor.

ST SPRITE FACTORY

An introductory page in the documentation sets the tone. You're instructed to have three blank disks ready to unarchive files from the package's disk. If interested in looking at a GFA BASIC demo, you'll need still another disk. This is all in addition to the central program, also on the package disk and ready to use.

You end up with a handful of separate disks. Each contains a program useful in designing sprites or in helping you use them. Each includes commented source code and a demo. Each shows ways you can take advantage of the Atari ST's hardware speed and get around the hardware's lack of direct graphics and animation support.

So the tone is set as you let the ST unarc the files. You begin to realize that this package does not scrimp in presenting help, does not play games as it helps you design your own. And while we usually think of animation as going with games, that animation has definite uses in other, perhaps more serious, programs.

Design: *ST Sprite Factory*'s main screen is well-presented. The 32 X 32 pixel design grid for individual sprite frames is on the left. The 16 low resolution colors line the screen's upper section. The menu box is on the right, just above a small square showing the normal-sized image you design. The menu offers an excellent selection of drawing tools for creating sprite shapes.

The drawing tools are similar to those found in some paint programs. In addition to free-hand drawing, you can create boxes and circles (solid or outline) and lines. The free drawing can be mirrored (H, V, or both). Fills can be done and you can also change all pixels of one color to another palette color. A sprite frame can be rotated by single degrees or by 90 degree quick turns. The image can be flipped (H or V). Begin the copy and paste by free-hand drawing around the selected section. That section can then be manipulated with many of the drawing tools on a separate buffer screen. Individual frames can be quickly cleared. A mistake may be eliminated with an undo.

Also, the sprite image can shrink by a variable amount. Using the shrink, you could take a full frame image and, by repeatedly copying the image from one frame to the next and shrinking it a little each time, see it diminish to nothing and, by reversing the sequence with the playing animation, watch it grow from nothing. While the shrink works on both axes equally, it's also possible to distort the image by using different shrink values for the X or Y axis.

The color palette is easily set within a separate menu box. You can click for a blend of hues between any two palette colors or swap two colors. It's also possible to temporarily leave the color menu for a view of the sprite image as you change the colors. The program's main screen has arrows for moving the image one pixel at a

time in one of the four edge directions. The X and Y coordinates for drawing in the design grid are shown. And the frame number you're working on is also there. When you've finished a series of sprite frames, you can see how they animate in sequence (up to 1000 frames ... enough for you?) and the speed of that animation can be adjusted. When you set the animation sequence, you choose each frame individually with a quick click. This allows you to animate frames in any order, not solely by following the order in which you created those frames or the order by which they are numbered. The animation is then shown in the small box on the design screen's lower right.

The sprite images are saved in Degas files, 60 sprites to a screen (6 rows of 10 across). Two sprite screens can be in memory at once and it's possible to do copies or inserts from one to the other. You can load and save sprite screens, color palettes, and animation sequences. You can also save a monoplane bit mask file of your sprites, for use when programming the sprite animation to go with a background.

Joystick: Interested in seeing what your sprite animation looks like under joystick control? The Joystick Program, one of those unarchived files, will do the job. Begin by loading a sprite file into the Joystick Program. Then choose each direction of the joystick and assign a sprite image, or multiple images in a sequence, to that direction. This includes the centered stick position and the button-down for each of the directions. Options allow you to set the number of vertical blanks (there are 60 of them per second) before the next frame is shown and to set the speed, or number of pixels the image will move relative to the previous frame.

When you're ready to see what they look like, go to a full screen background and move the sprites. You can load your own background, which must be standard Degas, not Degas Elite. Sequences you develop can be saved. To determine the results when you place and move sprite images on a background or with other images, you can also set the mask mode (to prepare the screen) and the copy mode (to plot the pixels). This part can be a bit complex, or you can just ignore it all. By using the various mask and copy modes, you can come up with 80 combinations. Usually these are set just once for a sequence. Defaults are provided, but you may enjoy experimenting.

Mapmaker: Sprites have a number of uses -- animation is not the only one. The Mapmaker Program uses sprite images as primitives for a playfield. The demo uses three sprite screen files to create a map of 500 screens (100 screens per level; five levels). Those 500 screens come from a 150K set of files (the three Degas sprite screens plus one 60K map file). You're able to move around the screens with the arrow keys or look at the individual sprite screens. You can use this program to create your own maps with your own sprite files.

Scroll: While the Mapmaker uses coarse scrolling and page flipping, the Scroll demo shows fine scrolling of a geometric design.

GFA BASIC: An example is included showing how GFA BASIC can be used to load Degas files and, with sprite screens, to create frame flipping animation. You'll need GFA BASIC to study the program, although you can run it with the GFA BASIC Player Program (CN ST Library disk 130).

Documentation: Far too many programs seem to suffer from inadequate documentation. A programmer may have spent an incredible amount of time developing the software, only to have printed documentation that gives an impression best left on the farm. That's not what you'll find here.

The documentation for *ST Sprite Factory* is a 50-page booklet (about 6" X 9"). The well-designed booklet leads you through the creation of sprites with clear suggestions. It includes a six-page animation tutorial. The Joystick and Mapmaker Programs are explained. An 11-page "true confession" from *Sprite Factory*'s author, Mike Hollenbeck, discusses the ST's operating system and animation. Finally, there is a five-page essay on sprite collision detection by Shelby Moore.

Within the documentation, memory and screen structure are discussed and programming suggestions are made. The documentation includes some important tutorial program lines written in both Pascal and C.

Other Notes: The programs were written in O.S.S. Personal Pascal and the commented Pascal source code is on the disk for the Mapmaker, Joystick, and Scroll Programs. You'll need to study and adapt that source code to create your own programs with capabilities similar to these three. With the sprite's 32 pixel height, a 5X magnification grid is used for design. That magnification is just a little low for comfortable use, but that lower magnification seems a fair trade-off for the taller sprite frame. Pascal programmers may well consider the disk, not copy protected, to be a trove of treasures. And programmers in other languages could find great help.

Even non-programmers interested in animation may find this package worth considering. The dedicated animation programs available for the ST use Degas files, as does *ST Sprite Factory*. With the helpful tools and the discussions of

technique, animators using *Make It Move* (CN March 1987 ... now distributed by MichTron) or *Aegis Animator ST* (CN April 1987) might want to consider this one. They could quickly find that this software package offers great aid in developing the smaller cel images often important in those stand-alone animations.

A utility disk is being planned by the publisher. With the utility, you will be able to generate source code from *ST Sprite Factory* files. This could greatly aid those looking for additional specific help. And you'll also be able to use either NeoChrome or Degas formats.

Summary: Programmers will need to clearly understand their language, but using a major STandard -- Degas format files -- could move the process along considerably. Mike Hollenbeck has put together an easily used design package and enhanced it by including supplemental programs, Pascal source code files, and tutorials.

ST Sprite Factory ($39.95) is a package offering great aid to programmers and non-programmers interested in the animation of small images on the Atari ST. While a single software package cannot be all to everyone, this one could be a lot to many.

COMPARISON AND CONCLUSION

A strong point of *Pro Sprite Designer* is the ease of quickly using a sprite sequence within one of the supported languages via the sprite handler program. And, for those who know how to incorporate it, the data conversion program will list the sprite palette and frame image information for a program to use directly.

The second disk reviewed, *ST Sprite Factory*, includes a design program with numerous drawing features. The supplemental programs with source code give those interested an opportunity to try out ideas and to see how it's all done. By using a standard Degas format, there's usefulness to both programmers and non-programming animators.

Each of these two software packages has strength in its offering. They both aid in the sometimes tedious job of designing small graphic images for use in animation. And for all ST users, that is a positive sign: as these and other programming utilities become available, mundane tasks could be lessened ... imaginative efforts could be encouraged.

[Eidersoft, PO Box 288, Burgettstown, PA 15021. (412)947-3739. Future Software Systems, 21125 Chatsworth St., Chatsworth, CA 91311 (818)341-8681.]

THE BEST PRICES FOR THE BEST PC

SONY 3 1/2" DISKETTES

BULK - BOX OF 50 SS/DD - $55.00 + $2.50 S/H EACH
BOX OF 50 DS/DD - $72.50 BOX

BOXES OF 10 WITH SLEEVES AND LABELS

BOX OF 10 SS/DD - $12.50 + $ .50 S/H EACH
BOX OF 10 SS/DD - $16.95 BOX

AMARAY STORAGE CASES

THESE BOXES, THE AMARAY DISK BANK "SYSTEM/3" ARE EXCELLENT STORAGE DEVICES FOR YOUR 3 1/2" DISKS. EACH 'SYSTEM' CONTAINS THREE INTERLOCKING MODULES, EACH OF WHICH CAN CONTAIN UP TO 12 DISKETTES. YOU CAN EXPAND THESE WITH ADDITIONAL MODULES AS YOU NEED. THEY CAN BE ARRANGED EITHER HORIZONTALLY OR VERTICALLY, AND EACH MODULE IS FULLY DETACHABLE AND TRANSPORTABLE. NORMALLY RETAILING FOR $14.95 ---------

SPECIALLY PRICED AT $9.95

A DISK A MONTH FOR THE ST

WOULDN'T YOU LIKE TO RECEIVE A DISKETTE LOADED WITH THE LATEST AND BEST IN ST PUBLIC DOMAIN SOFTWARE EVERY MONTH? AND WOULDN'T YOU LIKE TO GET IT AUTOMATICALLY? AND, MOST IMPORTANT, WOULDN'T YOU LIKE TO GET ALL THIS FOR A REASONABLE PRICE? WELL, NOW YOU CAN - EACH MONTH WE WILL DELIVER TO YOU A NEW DISK, PACKED WITH THE LATEST PROGRAMS FOR THE ST. YOU WILL ALWAYS GET A MINIMUM OF EIGHT (8) SUPER PROGRAMS THAT PROVIDE ENTERTAINMENT, VARIETY, AND VALUE. YOU WILL FIND PRODUCTIVE HOME MANAGEMENT PROGRAMS, ENJOYABLE ADVENTURES & GAMES, EXCELLENT TUTORIALS, AND HELFUL UTILITIES. AND ALL OF THIS - 12 DISKS A YEAR - FOR ONLY----------$44.95

PATNOR Enterprises, PO BOX 370782, El Paso, TX 79937

1-800-862-2345 - DIAL TONE - THEN DIAL "PAT" - VISA/MC ORDERS ONLY

AnsiGraf

An Ansi/Graphics Terminal Emulator for the Atari 520ST

- Ansi x3.64 terminal emulation
- VT100 submode
- Tektronix 4014 graphics emulation

AnsiGraf uses the GEM interface with menus and dialog boxes to set and save terminal parameters. Supports separate text and graphics screens, optionally viewable concurrently, multiple text pages, Xmodem upload/download, text/graphics to printer or save to disk, programmable function keys. Price: $79.95

Grafikon, Ltd.
Attn: R. Kulkarni or G. Fekete
P.O. Box 446
College Park, Md. 20740

Phone: (301) 937 - 3394

WHERE DOES ALL YOUR MONEY GO?

Find Out with PHASAR

Review by John Barnes

I have long looked for a way to use my computer to track all the rat holes that I pour my money down. Up to now, various home accounting packages for Atari computers looked like they could not cut the mustard. *SynCalc*, after all, could only hold a half-year's worth of checks. *VisiCalc* was fine for my tax return (I never did get it to convert to *SynCalc*). The raw power of the ST prompted me to renew the search. I figured there should be plenty of memory and adequate file storage. I didn't want to take a course in accounting so that I could set the problem up on a database manager.

PHASAR, from Marksman Technology Inc., via Antic Publishing Co., has answered my prayers. I'm not quite ready to set my 70-year-old mother up with the program, but I am satisfied that I can bring my own budgeting under control and perhaps save a few bucks some time soon.

PHASAR stands for Professional Home Accounting System and Register. The program supposedly operates on the IBM PC, XT, AT, and compatible, the Amiga, and the Atari ST. It is designed for HOME accounting, I suspect that it would work marginally for a club, and I doubt that it would be useful for anything that requires accounts receivable or billings from a customer file. I am told that some small business with limited product lines also use the product. The model used is, however, single-entry bookkeeping and this is simply not powerful enough for most business situations.

I also looked at *Dollars and $ense*, but it turned out to be such a dog that I soon gave up on it, except for figuring out how to make it work well enough to be fair in this review.

GETTING STARTED

The package contains three disks and a manual in a sturdy 3-ring binder. The disks are divided up so that you can, in principle, operate with a single-sided drive on a 520 ST. You may, however, feel cramped doing this. I was very happy on a 1040 using about 250 K of persistent RAM-disk. My standard advice to 520 owners is to spring for some more memory, with a double sided drive to follow (if you don't already have one). In this configuration you should have lots of elbow room.

PHASAR allows you to specify the drive and path for some of the files you use regularly and to store this information in a permanent configuration file so that everything can be right there when the program loads. This is an elegant solution more software designers should use.

I am not too wild about the screen colors that PHASAR chooses and I wish they would either leave my default colors alone or let me specify them in the configuration file. I can, of course change them from the desktop, but this is something of a nuisance.

The manual is well written, even if it does rely heavily on a canned example. The example is however, much more than a simple-minded "gee whiz" tutorial, and it is worthwhile to browse around a bit to get the feeling of the environment before you work up your own data.

Getting your own act together is a formidable task. I strongly advise you to start at the beginning of your fiscal year so that you don't get snowed under. Ease of data entry is, however, a very strong point in PHASAR because the program is very forgiving about letting you add data and change existing data.

You will first need to define the various accounts, categories, standard transactions, and similar items that you will need to work with. This is far from trivial, and it might be nice to have some skeletons to work with. There is no need to be too fussy in the early stages because the program is very forgiving about letting you alter the setup later.

WHILE UNDER WAY

The basic unit of information is the "transaction". Working within a pre-established account, such as your checking account, you enter individual transactions, such as checks or deposits. You also set up "standard" transactions to be invoked whenever you need them. I have a biweekly set for my paycheck, a monthly set for recurring items (mortgage payment, life insurance premium, phone bill, etc.). The biweekly set for the paycheck is fairly complicated because I tried to assign all of the various taxes and deductions to their proper places. I see little enough of my paycheck and it's nice to see how Uncle uses all the rest. I'll need all this separated information anyway at tax time. Standard transaction files are easy to update.

As you enter a transaction you assign a payee and distribute it to an expense category. If your payee is the name of an "account" that you have previously established PHASAR automatically transfers your payment out of the account you are working on and into the payee account, e.g. a credit card account. In order to keep really good track of your expenses you will need to enter transactions into these accounts also.

If there is a weakness in PHASAR, it is in this matter of accounts and categories. The modern two-earner family may find that 40 accounts and 97 expense categories are not enough, especially if they maintain separate accounts for checking, savings, credit cards, loans, retirement, etc. PHASAR's limits do, however, make good use of screen space.

Hitting the [HELP] key is a great way to get advice when you need it. The HELP messages are usually little menus that give you something to try. If you try something and you don't like it, you can always back out. CTRL-L is also a handy key because it is often used to display lists of allowed responses. The program does a lot of integrity checking, so it is important to be precise, although it always seems to catch mistakes right away.

Hitting the [F2] key gives you a handy online calculator for those cases where you need to split up a transaction or check your addition.

It pays to be systematic. PHASAR uses the previous transaction as a model to set default values for some responses. It is best to enter all of your checking account transactions before proceeding to your credit card transactions.

The program is a GEM application, with drop down menus in the outer shell so that you can get to your desktop easily. Once inside, however, you will find that most of the screens are fixed formats. The appearance here is somewhat clunky, but very functional. We are, after all working with words and numbers, not graphic images. As mentioned previously the HELP function gives pop-up menus that you can select from with the mouse or a keystroke. The mouse is also useful for positioning the cursor when editing data.

PHASAR displays updated account balances during transaction entry, so it is easy to see if your NOW account will drop below its minimum balance or whether your next ATM withdrawal will break the bank. It is not, however, as flexible as a spread sheet with regard to playing "what if" games.

Your setup and transaction data are stored in a file named "PHASAR.REG" (the so-called "register" file). You should keep this well backed up. This file can get pretty big and it is resident in memory all the time. I have an uneasy feeling that some 520 ST owners will run out of space before the end of a fiscal year.

LOOKING AT THE RESULTS

The drop-down menu labelled "Reports" is your first entry to summarizing how your money comes and goes. This menu also supports account confirmation so that you can make sure that transactions have been properly posted to your various accounts. Reports include transaction reports, reports by account, and reports by category each of which can be displayed on the screen, sent to a printer, or sent to a file. The report formats are, once again, a little clunky, but the program does not spin its wheels trying to give you GEM windows when you don't need them. The reports presented are functional and well organized.

The disk output function (think of it as "data export") is handy if you want to use a spreadsheet, database manager, or word processor to organize your financial data into a different form. It's a shame that there is no similar function for "importing" data, because this would simplify switching for those consumers who are frustrated with a lesser product or who want to upgrade from a spreadsheet-based system.

Another menu, called "Analysis", presents information on aggregates such as net worth and budget performance. This requires some supplementary information, such as the value of your house, that is not normally part of the transaction system. You should include mortgage loans, auto loans, etc. in your transaction system in order to get a complete picture. The analysis section also allows you to test or compare investment and loan scenarios. This is pretty useful.

TAX MATTERS

I used the tax side of the package to make a projection of my 1987 tax liability. I liked what I saw because there is complete flexibility for creating the forms and tables you need. The best approach to setting up is to take the model PHASAR.TAX file, browse through it, and modify it to suit your needs rather than those of Egbert and Eloise (the fictional couple dramatized in the tutorial). I would like to see a few more schedules (Schedule B, for example, and a form for estimated taxes), but I found it easy to create a partial Schedule B. Creating a form for my Maryland return with combined separate filing should be a real challenge, though.

I did notice that there was very little memory left on my 1040 while working with PHTAX.PRG, and I suspect that a 520 ST user could not use it unless he had a very small transaction set and the most primitive of tax forms and tables.

Be careful when setting up your income and expense categories so that you will be able to separate things on your tax return. The procedure given for altering your category names and their contents is very good. It is probably worthwhile to take a fling at the tax part early in the year so that you can be sure that things are set up right. I think the program does a nice job on this. Although the tax tables are outmoded, you can modify the ones that are built in.

In speaking to ANTIC, I understand that they are working to address the changes brought about by the Lawyers and Accountants Relief Act of 1986. It is not yet clear whether this needs a new version of the tax program or simply a new PHASAR.TAX file. If anyone comes up with something they could help all of us by uploading it to the WAACE ST BBS. I hope to do this by stripping the personal stuff out of my financial model and converting it to a more generic form.

PHASAR does not pretend to make IRS-ready output, but it is a big help to have annotated lists of numbers handy on April 14th.

SIDE ISSUES

An additional module called "LISTS" is used for maintaining an address file and a list of special occasions. These implementations are OK, but I find the similar functions in Deskcart more useful.

THE COMPETITION

When CN asked me to do this review they sent along a program called *Dollars and $ense*, hoping for a side-by-side comparison. I did not provide this because *Dollars and $ense* is a dog. A quick check on Genie and with various software stores confirmed my impression. The program illustrates the pitfalls of trying to bring a successful program from the MacIntosh world into the Atari world.

Program installation is a dud; you have to drag in GDOS and an ASSIGN.SYS file. The program as shipped is always looking to disk A; there is a lot of swapping on a floppy-based system.

It is just plain stupid to use GEM to output simple tables of text and numbers. I want my data now, not 15 minutes from now. I was attracted to the program because it is a pretty GEM-based program. The documentation is well written. After entering a modest amount of data, I asked for a printout and the program simply died. I found a fix on Genie and proceeded a bit further.

At this point I discovered that entering new expense categories was much more troublesome than with PHASAR and the budget process was getting in the way. Operating with GEM windows for some of the report and data entry functions was also slow.

It is rumored that, as of this writing, *Dollars and $ense* is off the market, so there is no need for further bashing except as a warning to future software developers.

THE BOTTOM LINE

PHASAR is well worth the price you pay. It does a nice job of taking you to your own "bottom line". The program is a harsh mistress because it enforces a lot of discipline. The reward is a remarkably clear picture of your financial strengths and weaknesses (do I REALLY spend all that on my computer?). ANTIC's policy for supporting their products is well known and I suspect you should not have too much trouble. The fact that this program runs on many machines augurs well for continued support and development toward a bug-free product (although I have not yet seen a major crash).

It is gratifying to be able to write a really positive review about a product that is as useful as this one. Keep an eye on GENie and the WAACE BBS for more hints and kinks.

CUSTOMIZE YOUR ATARI ST COMPUTER

EZ-RAM 520™

Solderless 1/2 meg upgrade for your 520 ST. Installs in less than 15 minutes using a plug in method.
- Illustrated instructions
- High quality components
- Blitter compatible
- 1 yr. warranty

Fall Special 10% off any order. (see the review in Sept. ST Informer)

Retail $149.95

Z-Time™

Battery Backed-up Clock/Calendar Chip

Installs in minutes to give you 10 or more years of accurate time keeping.
-Chip sized
-Illustrated instructions
-3 yr. warranty

520 st $49.95
520 stfm, 1040 $59.95

Apple and IBM versions availible.

To order:
Contact your local dealer or direct from Terrific Corp.
17 St. Mary's Ct
Brookline, MA 02146
(617) 232-2317

Order by Visa/MC/COD/Prepay

EZRAM and Z-Time are trademarks of Terrific Corp. ATARI, 520, 520stfm, 1040 are trademarks of Atari Corp.

terrific PERIPHERALS

ATARI SCUTTLEBITS (Continued)

IBM

International Business Machines (IBM) Corporation announced it's first significant increase in profit since early 1986. For the 3rd quarter of 1987 profits rose by 12.2%. For the 9 months of 1987, total revenues rose by 5.5% to $36.2 billion from $34.3 billion for the same period of 1986. (Did you notice that IBM's total revenues over the last four quarters are more than 25 times larger than Apple total sales for fiscal 1987.)

Despite this impressive gain, IBM stock did not appreciate prior to Black Monday. Investors held back puzzled as to why IBM's profitability failed to improve more significantly given that 14,000 employees were laid off at the end of the second quarter. On the other hand, IBM profitability was aided by the fall in the U.S. dollar which added roughly $300 million in profits and over $2 billion to revenue over the first 3 quarters of 1987.

IBM closed at $125.25 per share on October 19. If I only had some more cash on hand to buy. This market close was more than $50 below its August high. However, be prepared to move out again quickly with the blue chips such as IBM.

Nibble Bits

- WordPerfect 4.1 for the Atari ST is now available. It has all the pull-down menus and features that accompany the MacIntosh version released last month. Early purchasers say it has a few bugs but knowing the folks from Word Perfect, they will be corrected in very short order. L&Y Computers in Woodbridge is selling version 4.1 for around $200.

- A high resolution color monitor is being made for Atari right now in the Far East. It will be compatible with both the ST line of computers and the Mega. Look for this monitor around June 1988.

- According to a rumor reported in InfoWorld, look for Steve Jobs of Apple fame to share with Atari Corp. a custom graphics chip. According to this report, it will be shown at Atari's booth at COMDEX.

Next month some Christmas suggestions for both the ST and 8 bit machines and electronics in general.

CLASSIFIED ADS

ATARI 800XL, ATARI 1050 DISK DRIVE, W/Sparta-DOS, Commodore 1702 monitor, ATARI Assembler/Editor, Tricky Tutorial #14, The Arcade Machine, Solo Flight, Star League Baseball, Leader Board, Blue Max, F-15 Strike Eagle, Action Language, Monkey Wrench II, Atari Revision "C" cartridge plus several manuals. All for $325.00. Ham Gear: Kenwood Transceiver model TS-530SP, $575.00, Kenwood Speaker SP-230, $65.00, the ham gear items are NEW. Phone James (205) 793-3398.

FOR SALE: 2 Indus GT disk drives, $100 each (orig. $246.49); Atari 800XL, $25; MPP-1000E modem for Atari, $20 (orig. $69.99); Software, $50 (includes Disk Wizard, Top Dos, Synfile, Syncalc, Atariwriter cartridge, Pac Man & other games, custom written label program, supplies). Call Barry 202-861-0620.

[Classified ads are free to (non-commercial) subscribers. Otherwise, classified ad cost is $0.10/word.]

* * * * * * *

EveCon 5: Science Fiction, Fantasy, Gaming

The First and Friendliest Convention of the New Year, will be held January 1, 2, and 3 of 1988 at the Stouffers Concourse Hotel on Route One, Crystal City, VA, just across the Potomac River from Washington, DC.

Guests will include D. Allen Murphy, Nancy Janda, and Hal Clement, among many others. EveCon features a mix of Science Fact and Fiction, Fantasy, Costumes, Computers, and Gaming.

Pre-Registration is $15 until Dec. 1, then $20 At The Door for all three days. Send to: FanTek-EveCon, Box 128, Aberdeen, MD 21001. Please include a self-addressed stamped envelope.

* * * * * * *

Looking for a Good
CHRISTMAS PRESENT?

Why not give a year's
Subscription to
CURRENT NOTES

Check your mailing label.
If it says 8711 or 8712,
it is TIME TO RENEW!

Current Notes ST Library

[Note: the programs on these disks are either public domain, or copyrighted but distributed freely to the public (e.g. AtariWriter and Neochrome), or shareware products where the authors would like an additional payment if you decide you like their products. Numbers not listed have been discontinued. Disk numbers with a 'D', e.g. "151D", indicated a double-sided disk. Disks are $4 each. Include $1 for every 6 disks for postage and handling. Order from CURRENT NOTES LIBRARY, 122 N. Johnson Rd., Sterling, VA 22170. Note: the dates listed below indicate when the disk was first introduced in the CN Library. Underlined versions were updated later.]

October, 1985

#7: GRAPHICS DEMO NO.1. bounce, boink, cosine, cube, kal, somb, surfac, user, drop2, drop3, mvline, sa, stqix, stqux, strart, trench, doodle, cores, hex, pieram, popcorn, lowcirc, lowdemo, frac1,2,3,4, balls, clrmnd.
#8: SAMPLE "C" PROGRAMS NO.1. bob, dcos, drop2, drop3, foolish, fract1,2,3,4, mvline, mvline2, somb, stqix, stqux, stringar, trench, user.

December, 1985

#14: NEOCHROME. Program, docs, pictures (aafall, aaflag, aainsect, aatrain, chrome, greatwav, map34, robottv), slideneo.prg, neofun.prg.
#18: UTILITY NO.1. anaclock, breakout, deskcalc, digclock, puzzle, ram, ramacc, bicalc2, calc,calca2, noverify, dblboot, copydisk, sectedit, dump, squeeze, unsqueeze, format, mushro, stdio, title.bas, labels, print, spool, printdir, degcol, effects, neocon, slide, omaker, smaker, windows, timeda.

March, 1986

#21: GAME DISK NO.1. (Color) Life, Megaroids, Mastermind, Othello, Ripcord, Backgammon, Target, Journey
#22: SAMPLE ATARI BASIC PROGRAMS. ellips, wdsrch7, labels, star, rings, title, check, tesser, cribbage, mlabeler, sndtest, waveform, waver.
#25: DEGAS UTILITY. prgs to Convert Degas to Neochrome, Koalapad to Degas, tinyview, tinystuff, 20 fonts (archai, gramma, stenci, graph, classi, kungfu, thinte, graphics, cursiv, olde, woodcu, normal, daisyw, oldeng, ascii, sys, double, rally, comnputer, system), printer drivers (cgp220, ct1300, epson3, jx80c, mln193, ml93, necp3b, necp3c, ok120c, pj1080).

April, 1986

#27: dBMAN DEMO DISK. Demo disk has complete program, but limited to 30 records maximum. Use with Tutorial Disk (below).
#28: dBMAN TUTORIAL & MAILING LIST. Tutorial to teach you dBMAN. Includes mailing list program.
#29: MICROEMACS. Version 3.7i of Micro-EMACS editor. Includes editor, reference manual, and tutorial.
#30: UTILITY NO.2. Assembler); cpp22 (a command processor); rcv2 and dcopy (disk copiers); Forth-83; printdir and timedate; Labels; Pallet (set display colors); Picswitch (convert pics from other computers); Squnsq; Volume (change vol. name of a disk).

#31: PASCAL & MODULA-2. PASCAL: OSS doc files (4/18/86 - aesvdi, char, file intro, pasall, onedrive, port, time), PASCAL samples (pasfix1, scrndump, copy, dirlist, sounddem, copy2, datetime, compare, dump, convert2, istrval, mountain, shell, dseek MODULA2 demos (cube2, diamond2, fractal2, gemdem, lines, sierpins); BIOS and XBIOS functions; 11 files not yet tested on ST; VT52 emulator escapes.

April, 1986

#33: SAMPLE "C" PROGRAMS NO.2. cc, digit, fixed, debug, qio, pi3con, printdir, ramfree, sound, ttool, vdisamp, windtst, and more.
#34: MUSIC ON YOUR ST. ST Music Box from XLent, Deluxe Piano Player.
#36: DESK ACCESSORIES. TI-59 calc, calendar, digi clocks, ramdisks, free ram, screen snapshot, sector ed, bkground colors, games, ST Tips.
#37: GAME DISK NO.2. (Color) BASIC Games (Bomber, Scratch, Switchbox), Celestial Caesers, Rip- cord, Score4, Battleship, Blackjack, Mad Libs, Maze Maker, Mylife, Box the Dragon, Mastermind, hints for Sundog.

July/August 1986

#39: ARCADE DEMOS. working demos of Joust, Time Bandits (ver .96), and Cracked.
#40: TINY COLOR NO.1. bee, comet, commie, dire, explorer, fractal, insect, map34, racecar, rockets, sailboat, sghost, snake, spiral, supman, train, troubl, trumpwet, weather, yamato. Includes Tiny.prg and slide show program.
#41: TINY COLOR NO.2. 520st, aftburnr, amigabla, atari, corvette, courgar4, countach, ferrari, ghostbus, hitchhik, horses, kingtut, klingnon, loudness, miamice, oldmovie, porsche, portrait, rio, startrek, starwars, stoneage, threed, timewars, uranus, waace.
#42: TINY COLOR NO.3. at130xe, at400, at600xl, at800, at800xl, atari, bird, bull, demon, fish, goalie, hendrix, maxell, moon, moon2, mrx, parrot, parts, planets, saturn, shuttle, shuttle2, sun, winter.
#43: TERM PROGRAMS NO.2. 28 files, 3 compiled term prgs, 1 term emulator (not compiled) & latest patches to FLASH terminal program.
#45 ATARI USER GROUPS. Complete directory of Atari User Groups in ASCII file as well as in Zoomracks, H&D Base, and dBMAN formats.
#48: TINY MONO NO.1. apple, beagle, brooke, bunny, cad3d, chess1, chrsti, cowboy, hunger, jdxmas, morgan, nature, persian, polarbar, takeon, wetlime, xmascy.

September, 1986

#49: SAMPLE PASCAL PROGRAMS NO.1. convert2, graf, cntlin, prntscr2, scrdmp, dgen, cube, rlegen, reformat, stv924, multtask, polydiv, term, xreftb3, charsize, compare, copy, copy2, dirlist, dump, gembox, dirlist, dump, mountain, strval, theight, cursor, curstest and docs(copy2, intro, file, pasacc, time, port, aesvdi)
#51: TINY COLOR NO.4. alarm, at810, back, bobevans, brooke, dec, diner, drwhobox, enterpri, escher, fader, flight, floppy, galileo, halley, k9, maxell, morgan, motherst, mttam, newscast, relheat, robot, robottv, top, romulan, scicover, shut747, st1042.
#52: TINY COLOR NO.5. 3dview, aafall, aaflag, aainsect, airport2, alien, boy, bugsbull, bullseye, chaos,chrome, faucet, fonts, girl, girl2, house, jokey, map43i, scicover, startrek, uranus.
#53: ATARI ST FORTH-83 MODEL. Written by Laxen & Perry, includes FORTH language, editor, assembler, decompiler and Atari xbios functions.
#54: MONO GAME DISK NO.1. PuzzlePuzzle, move forward through labyrinth by completing puzzles.
#59: VIP TEMPLATES. 20 VIP templates, some simple, some quite sophistcated: acpay, acrec, blackbk, ckbkbal, dispurse, fedtax85, ledger, lotusinv, magee, menu, mistox, payroll, spi, spi2, tryme, z, zlife, zrelease, starter
#60: MUSIC STUDIO SONGS. Some 50 songs for MUSIC STUDIO
#61: PRINTER DRIVERS. First Word (ascii, bro10p, bro12pt, bro15pt, bro-hr15, epfx80, esfx80, epslx80, lq800, oki92, oki192, pan109, prortr, pr1215, 1stnx10, 1stsg10), ST Writer (vers.<1.5: gemini, legend, panas; vers>1.5: epsmx80, gemini10, nec8023a, pan1091); Degas (panson, cgp220, cti300, epson3, jx80c, ml193, ml84, ml93, necp3b, necp3c, oki20b, oki20c, pj1080, prowtr, sg10). Star and Gemini fonts (computer, cut, freench1, olde, outline, russ1, smooth, stylish). spool33k.prg; prtspool.ttp.
#62: HACK. Dungeons and dragons like game where you (the adventurer) descend into depths of the dungeon in search of the Amulet of Yendor.
#63: UTILITY NO.3. WP desk acc (word400), floppy disk indexer (fdi), file squeezer, unsqeezer, pic conv & comp utilities (dega2colr, dega2neo, koadeg, neo2dega, tinyview, tinystuff, tiny docs, picsw6.prg); ramdisk copy prg (ultcopy); library prs (backup.ttp, contents.prg, frmtutil.prg, fdi.tos); timedate.acc; spool33k; sector editor.
#64: DOLL ANIMATION DEMO. Spinning dolls. Requires 1Mb, 4.5 min to load. (color).
65: TINY COLOR NO.6. altmap, at1200xl, bat, bugs, coyote, dragon3, dungeon, gibson, girl3, marie2, mariel, miamivic, mickey2,mugs, scully, skate, sunset, toyotvan, vanhalen, warriors, wizard, xevious, tinystuf/tinyview.
#66: GLOBE DEMO DISK. Spinning world globe, rich2, sphere, stpatterns, supbox. Requires 1 Mb, (color).
#67: BALL/BIRD DEMO DISK. Ball bouncing on mirror with multiple light sources & flying bird demo. (color)
68: CAD 3D PICTURES. picture files for use with Tom Hudson's CAD 3D Program.
#69/#70 GRAPHIC ARTIST DEMO. Demo of this powerful CAD package includes long-running demo plus all features except writing to disk and printing. Requires both #69 and #70.

October, 1986

#71: FORTHMACS Ver. 1.1. (c) 1986 by Bradley Forthware, Forthmacs, the result of 4 yrs of intensive Forth development work on a number of 68000 based computers, is one of the very best Forth systems available today. It is full of features to make programming easy and give you total control of your computer.
#72: UTILITY NO.4. Format & copy 400K and 800K; library & delibrar; make512 & make1meg; Fn Key Labels; muscnvrt; desk ACC(cli, fastram, fortune, prints, deskman); fileprint; proff; print hi-res on color system
#73: UTILITY NO.5. archiver; Copy files to ramdisk; ramdisk acc; disk library prgs; disk speed checker; encrypt; title page printer; V2 of desk acc wp; convert Megamax H files to Personal Pascal I files; calc prg.
#75: TINY COLOR NO.7. Pics from PRINTTECHNIK demo disk: capital, car, carddame, cardking, ct-mag, eifel, fl-pferd, girl6, girl8, gohorse, jacksig, moonastr, pferde, schadma, tina, train PLUS tiny prgs.
#76D: PRINT-TECHNIK Sound Digitizer Demo. Requires 1Mb, DS drive, color.
#77: CAD 3D ANIMATION DEMO. From ANTIC: Fractal Mountain.

November, 1986

#78D: DIGI SOUND DEMO NO.1. OXYGEN - Disco Version (By Hypnosis) Amazing quality of digitized sounds coming from your ST speaker with this and the next disk. 1Mb,DS
#79D: DIGI SOUND DEMO NO.2. FOREIGN AFFAIR - (by Mike Oldfield), 1Mb, DS

Order from Current Notes Library, 122 N. Johnson Rd., Sterling, VA 22170. $4/disk plus $1/(6 disks) for shipping.

Current Notes ST Library

#80: MONO GAME DISK NO.2. MONOPOOL - a pool game with 6 balls; KRABAT - a chess game for beginning to intermediate players.
#81: UTILITY NO.6. VER 3 of word400; address Book prg; change drive icons to diskettes; directory lister; quick I/O formatter; fast ramdisk; Font Editor; disk directory lister; hard disk backup; fix xmodem downloads; search disk directory; send setup comands to Epson printers; test RAM.
#82: SAMPLE "C" PROGRAMS NO.3. 3d, artwork, arxx, cc, clock, fractal, li, palette, print, qix, startup, ttool2, qio.
#83: SAMPLE MODULA-2 PROGRAMS NO.1. Shell for ARC.TTP with source; files for line A calls; patches to V2 of Modula 2; comand line interface; list directory; format disk; display free RAM; Huffman compression algorithmn.
#84: ST TERM DEMO DISK. working demo of ST-Term Ver 2.1. FLASH batch download DO File Generator; 2 more terminal programs.
#85: SOUND & GRAPHICS NO.2. stspeech, mandlbox, disks, julia3, kleido, diskicon, OO TOPOS sample screens, music player & files.

December, 1986

#86: CP/M-80 EMULATOR TOS DISK. A complete CP/M-80 Version 2.2 compatible system environment. Disk includes TOS, PRG and DOC files and ARC file containing CPM programs on #87.
#87: CP/M-80 DISK #1. Disk in CP/M-80 format: two dozen CPM utilities released on Atari's CP/M disk. @, cpm.doc, cpmtos, crcgen, ddtz, default, key, edtkey, emu.txt, emuio.s, inidir, inidsk,movata.asm, nswp207, nulu, nulu.doc, read.asm, read, read.me, scopy, setkey, toscpm, tosdir, ws.key, xsub.
#88A: TERM PROGRAMS NO.3. UNITERM VT102 Emulator, Version 1.7B. (Uniterm emulates VT102/220 text terminals and Tektronix's 4014 graphics terminal. Includes XModem and Kermit protocols.)
#90: SHINNY BUBBLES. Color demo shown at COMDEX '86.
#92: SAMPLE MODULA-2 PROGRAMS NO.2. Includes ST Speech Modules and other enhancements to Modula-2. speech, talkhead, dataset, files, showchar, arghandl, bigsets,bits, fileio, scrctl, uscdstuf, 68k2, 68k3.
#93: SAMPLE PASCAL PROGRAMS NO.2. latest from OSS BBS; checkers, chemparse, GEMARC Menu, Printmaster to Typesetter, Joystick Routines, Acc Loader, plus 20 more PASCAL files.
#94: UTILITY NO.7. Make clipboard accessories; analyze dBMAN command files; print out strips of picture files; banner, marque, blast (fast dis- play of PIx & NEO files), Mac to Atari, PICDEX - Tiny prints.
#95: UTILITY NO.8. formatter (allows 9/10 secotrs per track, 80 - 82 sectors per disk side, fast or normal read), convert Degas fonts to Degas Elite, Elec. circuits for Easy Draw.
#96: TINY COLOR NO.8. bigcats (6-9), davenoe, donald1, eagle, eagle1, elf1, fruit, gorilla, headroom, marilyn, mars, mona-ami, pluto, ronald, tinyview and tinystuf.

February, 1987

#97: LITTLE SMALLTALK. Smalltalk language, editor, manual, and example programs. (Files are compressed, but arc.ttp & arcshel2 included.)
#98: XLISP Version 1.7. Includes XLISP language, manual, XLISPE editor, C source files, XLISP-AI conference from CompuServe.
#99D: DIGI SOUND DEMO NO.3. MATT'S MOOD - (by Matt Bianco), 1Mb, DS
#100: GAME DISK NO.3. (color) Football, Break Out, Missile, 4 Adv. Games (Larn, Magnon, Twilight Zone, & Ogre).
#101: GAME DISK NO.4. (color) Atartrek, Celestial Caesars (new ver.), Krabit (chess), Twixt, ST Aggrevation.
#102: UTILITY NO.9. Early version of Apple II emulator, bulk erase, disk dir. printer, disassemble, ramdisks (eternal, yard), disk format acc., ram disk loader, disk labels printing program, monitor st (debugging tool).
#103: SKYMAP. (mono) 1,560 of the brightest stars. Display map of stars, find a particular star, or identify a particular star.

3 CP/M-Format Disks Introduced

#C1: CP/M Telecom Disk. mexst & docs, mex11upd, areacode, kermit.txt, rs232.doc, numbers.doc.
#C2: CP/M-80 Utility Disk. 45 files: banner, d, dd, ds, dr, dr13, diszilog, du-87, duu, eraq, fbadgo, find2, mage, make, osd, password, print, recrev21, renext...
#C3: CP/M-80 GAMES. adventure, aliens, msbasic games (blkjak, horse, monster, rocket, wump, startrek, trade).

March, 1987

#104D: ALADDIN ST DEMO DISK. (color) Demo of new Visual Interactive Media by Disk Publicatons, Inc. Incredible graphics on your ST!
#105: CN MOVIE. Demo of animation effects possible on your NEO and DEGAS pictures using MAKE IT MOVE. (color)
#106: SMOOTH TALKER DEMO. (color) Demo of 5 talking educational programs from First Byte: Speller Bee, Kidtalk, Mathtalk, First Shapes, Speech Sampler.
#107: ST RAM DISKS. A must have disk! 25 Ramdisks, 7 Auto Loaders (fdcopier, intramdk, loadram, eternal, yard, ultcopy, fastramd, autoramd, mike5, ...)
#108: TINYPICS NO.1. Ghost Busters (cabbie, danak, danblast, demon2, demon4, gostmbl, marshm2, sigg2y2, sigourne, staypuf2, vincel2, weenie); **Raiders** (leathomp, lighteye, ouch, spike, wellofsl); tnyview3, tnystuf2.
#109: TINYPICS NO.2. Empire Stikes (ata1, darth, falcoln2, falcon, hansolo, stardes2, tiefigh2, xwing, yoda); **Shuttle** (astronau, blastoff, ground, landing, landing2, piggybac, spaceman, spmanclr, tower, treads); tnyview3.prg, tnystuf2.prg
#110: MODULA-2 SAMPLE DISK NO.3. Complete set of Modula-2 source code from the BBS of The Journal of Pascal, Ada & Modula-2; Samples of building library modules using AES calls; Source to access Russ Wetmore's Clipboard routines; String Library routines and more.
#111: PASCAL SAMPLE DISK NO.3. Complete source to ATARTREK (Star Trek for the ST); Complete source to CHECKERS; Sample routines to format a disk from the OSS BBS; Sample routines to read in a DEGAS picture file; GEMDOS calls from Pascal and more.
#112: GAME DISK NO.5. (color) Checkers with 6 skill levels; A slot Machine; Warzone; Daleks; Dragon; Nightcrawlers; 5-Card Stud Poker; Breakout; Yahtze.
#113: UTILITY NO.10. TURTLE a hard disk backup utility; PROGCALC a programmable calculator in medium rez; UNDELETER the BEST undeleter commercial or PD; FORMAT3 (for best results in FAST READ use 9 sectors a track 82 tracks as 10 sectors a track is slower); Alan Pages' VIDCOL.PRG to convert DEGAS Elite files to ASCII simulations of Vidtex for viewing by Flash.
#114: MUSIC STUDIO SONG DISK NO.2. Over 40 SNG files for use with Music Studio that play without a MIDI keyboard/speaker system (benhur, cagney, chariots, clearly, fdance, flowers, garparty, heyhey, mistered, sgtpeppr, starwars, strawber,...)
#115: ANIMATOR DISK. Aegis Animator Player with four ARC'ed routines to play. (animate, aegis2, headroom, player, valenani, voidship).
#116: ST SOFTWARE LIST. Complete listing of all available software for the ST compiled by Andy Nicola. (This disk is updated periodically.)

April, 1987

#117: ST DESK ACCESSORIES NO. 2. Acc load, eternal, format acc, index, kalklock, mobzdil2, new word, startup1.1.
#118: TINYPICS NO.3. Science Fiction (alien, cybermen, darkness, davros, depspace, drwho, lo, judith2, kingon, mornstar, pike, pinets, romulin, saavik, saturn, shipfire, shuttle1...)
#119: TINYPICS NO.4. Transport (autodesi, bicycle, boat, cnvrtabl, colorcar, corvette, cycle4, express, f14tomct, f15, f15strk, ferrari, mazda, model, ninja, por911,...)
#120: TINYPICS NO.5. Cartoons no. 1 (birds, bugs, bully, circus, coyote, daffy, ddcar, disney, disnmick, duckdog, flightc1, malefcnt, martian, mickey, pengy, roadrnnr, snowwhite)
#121: UTILITY NO. 11. address book, text browser, arxx, format.gem, gem font editor, font loading acc, start1.1
#122: GAME DISK NO.6. (color) Monopoly, Haunted House, Back gammon.
#123: SHAREWARE C COMPILER. By Mark A. Johnson. Includes C compiler, PD Ramdisk(s), PD command line interpreter, MicroEMACS text editor and bootup utility.
#124: ATARI ST ICON LANGUAGE, V6.3. This ICON language (a follow on to SNOBOL4) from the Univ. of Arizona was implemented by O. Rick Fonorrow and Jerry D. Nowlin.
#126: PUBLISHING PARTNER UTILITIES. Helvetic and Normal fonts with 18 various printer drivers including Epson, Gemini, Bluechip, Okidata, T321F, SB10F, LQ800F, SMM804, C8510A.
#127: ST FONT EDITORS/ LOADERS. Font Loader (High-res only), Gem Font Editor, Ver 1.11, and FED Font Editor.
#128D: STEELYBOINK!. By Tom Hudson, math by Mark Kinball. (color)

May, 1987

#129: SPHERES! DEMO. By S. Belczyk.(color)
#130: SAMPLE GFA BASIC PROGRAMS #1. GFA Run only version, terminal prg., sprite ed., torpedo game, fractals, archshell, format2, drawing prg., graphics demos:fx, display, gfa-cube.
#131: UTILITY NO.12. Programmer's Utility disk: uudecode, uuencode, bucket, kill, scach, make, setinit, verify, volume, 1-filepr, case, mase, ...)
#132: UTILITY NO.13. Disk library program (Diskcat), two text editors (less & vix), disk copy programs (autodisk, dcopy), startgem, access, rocp.
#133: SAMPLE C PROGRAMS NO.4. Source to code uudecode & uuencode, kermit.acc, citadel BBS & utilities, and VC-clone (spreadsheet prg).
#134: ST-REPLAY. Digitized sound demo of ST-Replay. Sound on color or mono. Picture on color only.
#135: SHANGHAI DEMO . (color or mono). full implementaton for single puzzle, solitaire only.
#136: MICRODEAL DEMO PROGRAMS. (color) Demos of Goldrunner, Tanglewood, airball, and sprite construction kit. Everything arc'd. Includes arc.ttp.
#137: TINYPICS NO.6. Cartoons No. 2 (banana, beetle bill, bilnopus, buzzybe2, capnopus, dungeon, ewoks, flower, garfield, gumby, hagar, heman, malthar, odie, pebbles,...)
#138: TINYPICS NO.7. Animals (abstrc15,

Order from Current Notes Library, 122 N. Johnson Rd., Sterling, VA 22170. $4/disk plus $1/(6 disks) for shipping.

Current Notes ST Library

bigcat10,11,16, chatter, cheval, cougar, elk, fish, fish2, flycatch, flyhorse, gorilla, horses, moth, parrot, poco, tiger2,...)
#139: MONO GAME DISK NO.3 larn2, ogre, ataritrek, maze maker, checkers, battleship, window ball.

June, 1987

#140: GAME DISK NO. 7 (color) Tripple Yahtzee, Wheel of Fortune, Pente, Sensori, Spacewar.
#141: GAME DISK NO. 8 (color) Azarian and DGDB (similar to SHAMUS).
#142: TERMINAL DISK NO. 5. Kermit, QT, Zenith, Zmodem, Forem Tutorial, Flash download, GEM Terminal prg.
#144: UTILITY NO.14. Alarm clock acc, C shell, buffer setup prg., coldboot.tos, display any res Degas on any res monitor, script for Degas slide show, harddisk auto boot, multiple file printer, mouse ed., spelling checker, rambuffr.acc
#145: UTILITY NO.15. Asl (print out multiple documents), Gulam (command line interpreter), Hdscan (selectively backup hard disk), Labels (disk label prg), Startgem (start GEM prgs from AUTO),...
#146: TINYPICS NO.8: Famous Folk (alien, avalon, baby2001, double, face1,2,3, firestart, ladyhawk, madonna2, marie2, mariel, mean, monalisa, rio, robot, ronald, termn8er, thief, wmms-buz)
#147: COLOR CLIP ART NO. 1 (avlabels, dikclip1, disnyclp, dav1-5, fantasy, fun, history, kids, macfctry, macpaint, maninspc, map1:2, men1:2, paint2:4:5:6:7:8, picture1:2, sport1:2, women1:2)
#148: GEM TUTORIALS, Columns 1-10 (windows, dialog handler, resource files, rsc tree structure, raster operations, menus, user interfaces, VDI graphics)
#149: GEM TUTORIALS, Columns 11-17 (GEM hooks, GEM events, form manager, user interfaces-2, coping with GEMDOS, interface potpourri #1, PC/ST Rsc converter)
#150: FIRST WORD PRINTER DRIVERS. ascii, brom1509, bro-10p, bro-hr15, eps-fx85, eps-jx80, eps-lx80, eps-rx80, gem1stw, gem-10x, hp-jetd, hp-jet-a, ibm-pro, kxp1092g, mp-165, necp2p3, necp6p7, nx10, nx-10ibm, oki-m182, oki-m192, p321, pj-1080a, proibm, prowrite, qume-2, riteman, sg-10ibm, smm804, star, starnl10, starsg10, starsibm, ta-se320,toshiba.
#151D: SPACE PROBE. A Cybermate animation (DS & 1 Mb).
#152: 3D CONTROL. A PD motion control language desk accesory for creating cybermate animation sequeces with CAD 3D, Version 2.0.

July/August, 1987

#153: EAMON ADVENTURE GAMES (color/mono) All the latest versions (Eamon Beginner's Cave; Devil's Tomb, Eamon Death Star, Holy Grail, 1st Eamon game version; ver 2.0 of main hall).

#154: UTILITY NO.16. Modula-2 Utilities: context2 Modula-2 editor; m2print ("pretty print" program); makefile utility; qcopy (source for disk copier prg); m2proc (displays procedures).
#155: UTILITY NO.17. dcopy20; diskfix; megablit drawing prg; most; qcopy; quiklbl2 (quick disk labels); ymodem batch accessory.
#156: SAMPLE "C" PROGRAMS NO. 5 (source for file selector box, two make utilities, source for QT term prg, term prg that supports xmodem, ymodem, and zmodem.)
#157: MULTI-LINGUAL WP DEMO. By Drew Haninger. Includes French, German, Spanish and Russian and Arabic fonts with demo font editor. Complete DOC file included.
#158: MONO CLIP ART NO. 1 (animals, flags1:2, symbols1:2:3, astrology, custom1:2:3:4, christian, mili- tary1:2, transla1:2:3:4:5)
#159: MONO CLIP ART NO. 2 (10 screens of uncompressed holiday and 'fun' clip art.)
#160: MONO CLIP ART NO. 3 (bluejay, canadago, carstruk, cheata, chipmunk, clipart 1:3:4:5:6:9:B:C, grabber, jaguar, sports1:2:3:5)
#161: TINYPICS NO. 9: Vehicles No. 2 (monochrome: B-36, bel222b, escort1, extra1, f15strk, hele, mgtf, phalarop, refuel, romulin, shuttle1:2, sparrow, sr-71a, stealth, topgun, travel2, U-2, vaxhall)
#162: HARD DISK UTILITIES. (dir count (gets around 40 folder limit); C source to HD directoyr; supra ver 2.61 utilities; turtule HD backup ver 2.15; add multiple HD to supra.)
#163: EDITOR DISK. PROEDIT by Jerry Cole: programming editor with outline feature; ConTEXT by Don Milne, designed for use with Modula-2.l

September, 1987

#164: GAME DISK NO.8. Stone Deluxe, Ship Combat, Lander, and Lunar.
#165: LIBRARY PROGRAMS. menu.prg, diskcat v1.3, turtle companion (includes PASCAL source to menu)
#166: UTILITY DISK NO.19. ICD (HD package), dlii (disk editor), gercopy (musical formater), xutility (multiple formats), modify seek rate (for IBM drives).
#167: TERMINAL PROGRAMS NO.6. wterm, bmodem, trans100, amulti v1.4.
#168: GFA BASIC PROGRAMS NO.2. source to stone deluxe, ship combat, and recalbdb v2. (record album db including source & runtime prg).
#169: GFA BASIC HELP DISK. Seven tutorial/tip files on using GFA BASIC by John B. Holden, graphics tutorial, plus med rez galloping horse.
#170: GFA BASIC Programs No.3. diox v0.95 (easy user interface for simplifying construction of dialog boxes in GFA Basic. Outputs source file.)
#171: C PROGRAMS NO.6. bmodem (terminal emulator), sealink (transfer protocol), sed, ctag (two unix-type utilities).
#172: JUGGLER DEMO. Graphics demo of juggler juggling three balls (converted from AMIGA) Color.

October, 1987

#173D: CYBERSCAPE. Animated graphics demo from ANTIC. See disk transform to spaceship, fly into and explore the Atari ST. 1Mb & DS drive.
#174D: STAR TREK ANIMATION. Several animated pictures featuring the Star Ship Enterprise. Constructed using CAD 3D.
#175: ST WRITER TEXT Ver 1.80. English, Spanish, and German versions of the latest TEXT-based version of ST Writer. Includes complete CN docs and several articles.
#176: ST WRITER GEM Ver 2.0. Version 2.2 **(ST Writer Elite)**. English, Spanish, and German versions of the new GEM-based ST Writer. Complete CN docs included.
#177: PASCAL SOURCE CODE. Program to recursively search for displaying complete disk directory, statistics routines, complex math routines, and disk library program.
#178: BREACH SCENARIOS: 16 Breach scenarios ranging from easy to the star level (most difficult).
#179: KID FUN. For younger kids: Kid Notes (musical keyboard player); Barnyard (simple version of Concentration); Kid Sketch (simplified drawing program). For older kids: Doodle (drawing program); and Deluxe Piano Player (very nice keyboard piano).

November, 1987

#180: STARNET BBS. Fully operational bulletin board system. Includes xmodem upload and download.
#181: XLISP 2.0. XLISP 2.0 with a language called VPS5. Docs from version 1.7 of XLISP.
#182: SPECTRUM PICTURE DISK. Eight Spectrum pictures (average size 40k). Spectrum allows up to 512 colors on the screen at once.
#183: SUPERNEO DEMO. Super new Neo picture show program that plays music in the background and displays a horizontal scrolling text bar at the bottom. The displayed text and pictures can be altered by the user.
#184: XFORMER. Atari 8-bit Emulator. The "official" emulator with a library of programs.
#185: DISK UTILITIES. Includes DISKMECH which can analyze copy protection and copy SOME disks, DC Formatter 2.2 which can format disks for Magic Sac, IBM emulators, ST normal and fast read, normal or extended format, or format a boot type disk.
#186: MONOPOLY. Includes GFA source code to this revised version of the popular board game.

ANALOG / ST LOG DISKS

These disks are provided by ANALOG magazine and include the programs covered in each monthly issue as well as other programs. Any docs needed must be obtained from the original magazines.

#A01 (Apr '86) anykey, mod1, mod2, mod3, mod4, sort, num2prt, strings1, stcheck, gemdemo, scratch, pics(boat, daffy, desert)
#A02 (May '86) craps, sounder2, colors512, celest, popcorn, pics(stlog41, after, davros, gerwalk, zgundam)
#A03 (Jun '86) arrays1, arrays2, calcpi, guesnum, mandel, calculat, doodler, sampler, pics (parts, circus, escher), target.prg
#A04 (Jul '86) 3ddemo, twogame, pianokbd, fraction, input, funchelp, pics(fish, gorilla, pezsq, biclock, yahtezee, fortune.acc, pictures.
#A08 (Nov '86) stboxes, ballit, stocks, graphics, graphpro, pics(epsgem, necpro, shuttle)
#A09 (Dec '86) vdidemo, dragon, fax, poolmono, life, pics(fgordon, kolboink, porsche, wizrdc1, stlog49)
#A10 (Jan '87) C-manship; Dr., Floppe; font tricks; slider subroutines; spell binder; windows part 1.
#A11 (Feb '87) C-manship; apcalen.bas (appointment calendar); create.prg (database create prg); money.prg (money program w/C source); windows part 2)
#A12 (Mar '87) C-manship; asm_edit.prg (AS68 Helper prg); pokrdicn.bas (poker dice listing); score4.prg (score Four prg w/C source); Midisoft demo prg)
#A13 (Apr '87) C-manship; Escher Cubes prg; Arc Shell prg w/source; Ray-gracing demo; uniterm.prg (pd terminal emulator); arcx.ttp (unsqueezer prg).
#A14 (May '87) C-manship; clock desk acc; hello.prg (assembly line prg); CZ-Patch prg; music.bas (steps & triads); cubed.bas (escher cubes source); tvision (basic source & compiled prg).
#A15 (June '87) C-mansip: ins and outs of menu bars, ST Labelmaker, Animation with PASCAL, Printer Fonts.
#A16 (July/August '87) C-manship: Looking into Windows, Floyd the Droid on the Run, Raster Sprite Editor, Desk Manager; Assembly Line.
#A17 (September '87)

Order from Current Notes Library, 122 N. Johnson Rd., Sterling, VA 22170. $4/disk plus $1/(6 disks) for shipping.

Current Notes ST Library

ST MAGIC DISKS

These disks contain Macintosh programs for use with the **Magic Sac Cartridge** on the ST. Disks are already in Magic format. All have been tested to verify that they work with the MAGIC SAC and can be used directly. Note: we have removed the Finder from each disk and added about 1/3 more programs.

#M0: MAGIC SAC. Version 4.36, (or the most recent ver) of MAGIC program.
#M2: TELECOM DISK NO. 1. BinHex 5.0, Free Term 1.8, FreeTerm.Doc, Kermit, PackIt III (V1.3), StuffIt 1.0, TermWorks 1.3.
#M3: UTILITY DISK NO. 1. DES, Font Doubler, MacDump, Mini Finder, PackIt III (V1.3), Reverse Screen 1.0b1, RMover, Scan, Set File. SLICER. Version Reader 1.1, Write Stream.
#M4: GAME DISK NO. 1. Backgammon, Bash Big Blue, Curves, MacLuff, MacYahtezee, Maze 3D, Meltdown, Missile Command, Munch, PepsiCas, Smile, Snow, Solitaire, Space Bubbles, Vax Runner II.
#M5: DISK LIBRARIAN. Disk Librarian Ver 1.82A. Disk Librarian Doc, Librarian Short Doc. Contains complet listing of CN Magic Library.
#M6: GAME DISK NO. 2. Ashes, Black Box, Destroyer, HexPuzzle, Killer Kalah, MacPoly Demo, Office Attack, Point Symmetry Demo, Snake, Solitaire, Trophy List, Wall Game, Wheel.
#M7: GAME DISK NO. 3. Ashes, Break the Bricks, Deep Ennui, Go, Mac Gunner, MacBugs, MacCommand, MacYahtzee, Wiz Fire 1.1
#M8: DESK ACCESSORIES NO. 1. 3DTTT Game, Art Thief, Ascii, Bagels Game, Big Ben, Calculator, CopyFile, DA Tester 1.5, Delete File, Desk Acc. Tester, DeskZap 1.2, Eject&Reset, Extras, File Hacker DA, File Tools, Font Grapper+, Font Grapper3, Hex Calculator, HP 12c, MemScan, MemWindow, MerriMac BlackJack, miniWriter, MockTerminal, MockWrite, Moire, MW Count, Other 3.0, Puzzle, Reader, Rubik's Cube, Sampler, Scrapbook, Scientific Calculator, SetFile 3.3, SkipFinder, TheBox, Tiler 1.5, Trails, Transfer, TrapList, Utils, Word Count, Zoom Idle.
#M9: UTILITY DISK NO. 2. Bind Icons, Change Appl. Font, Convert Desk Acc., Desk Accessory Mover, File Hacker, FontDoubler, Index, MakeScreen, MicroFinder, PurgeIcons, RamAStart 1.3, REdit, ResEd, SelectPaint, Show Version, User Interface Demo.
#M10: GRAPHICS DISK NO. 1. Amy, Artisto, ball demo, Big Ben, Brooke, Bugs, Curves, Display Message, Dragon, Fighting 51, Fourth Dimension, GARF, HotSex!, Liar's Club, Living Art, Max Headroom, Moire 3.0, Nightmare, Optical Illusion, Paint Grabber, Painter's Helper #1, Pattern*, Pisces, Rotations, Saddle, The Fourth Docs, ViewPaint 1.5.
#M11: PRINT UTILITIES. Coventry-12, Disk Labeler, Fast Eddie, Font Mover, Ink, MacWrite 4.5 to Text, miniWriter, MockWrite, Pica-10, ReadMacWrite, Walla Walla-9.
#M12: MACBILLBOARD. Chipmunks, Donald & daisy, Goofy At Bat, Announcement, Babe Ruth, Carrotprint, Classic illusions, Escher, Escher Hands, MacBILLBOARD (MacPaint clone), Max, Mickey and Minney, mm, Quick Tour, T-Shirt.
#M13: FONT DISK NO. 1. Akashi, AlgBlurb, Algebra, Athens, Boxie, Dover, Geneva, Hood River, ImageWriter, LED, London, Los Angeles, Luxor, Mars, Monaco, Park Ave, Pica, Ravenna, Rome, Runes, San Francisco, Seattle, Steel Brush, Ultra Bodoni.#M14: FONT DISK NO. 2. Bookman, Courier, Coventry, Dali, Genevaa, Hebrew, Manteco, Shadow Box, Sri Lanka, Times, Walla Walla, font display 4.6 w/docs.
#M15: GAME DISK NO. 4. Alice, Amps 3.0 (B2), Bricks, Canfield 2.0, Iago, Lets Get Tanked!, MacHeads, Nim, Space Attack, Third Dimension.
#M16: FONT DISK NO. 3. About Lachine, Alice, Avante Garde, Berkeley, Broadway, Camelot, Cartoon, Centura, Chancery, Eon, Exeter, Fallingwater, Fantaste Key, Fantaste!, Future, Ham, Helvitica, Hollywood, Lachine, Lineal, Madrid, Pittsubrg, San Quentin, Silicon Valley, Stencil, Unicol plus DAFont2.da and SysFonts.da.
#M17: DUNGEONS OF DOOM 4.0. Graphic adventure game.
#M18: DESK ACCESSORIES NO. 2. About Popup.txt, Alarm clock, Art Grapper+, Calculator+, Choose Scrapbook+, DA File, DA Tester 1.5, Disk Labeler, DiskInfo 1.45+SICNs, Explorer, Gone Fishin', Hex Calc, Label Maker, MemWindow, MiniWRITER 1.34, Multi-Scrapbook, MW 4.5 Counter.DA, Popup 1.0, ProCount, ReadiPrinter, Ruler, SFstartup 1.0, Skipfinder 6.1, Sleep, Stars 1.6, Stars II, Sysfonts, TeaTime, Timer.
#M19: PINBALL CONSTRUCTION SET GAMES. Pinball Construction Set Player plus 12 Games: Apple, Black Hole, Face, KalinBall, Madonna, Minute-Mag, Patchwork Mess, Phantom, Pure-Gemme, Samurai, The Royal Pain, Wizards Lair.
#M20: GAME DISK NO. 5. Chase'Em, Crystal Raider, Daleks, Golf MacWay, Kill File, Kill, King, King.MacWrite, On-The-Contrary, StuntCopter1.2.
#M21: GAME DISK NO. 6. Guess, Hacker's Contest, Hot Air Balloon, Match, Ramm1.0, Third Dimension, Trick-Track, Utaan Attack, Zero Gravity.
#M22: GRAPHICS DISK NO. 2. BlowUp 3.0, BlowUp Notes, CalendarMaker 2.2.1, Dynamo, Graphic, MadMenus, Math21, Rays, Simutree, Spiro, Tree, Vanlandingham.
#M23: VAMPIRE CASTLE. Graphic adventure game.
#M24: DEEP ANGST. Graphic adventure game. 1 Mb ST only.
#M25: GAME DISK NO. 7. Billiards, Cross Master Demo, Flash Cards, Hangman-9.0, MacLuff, Master Guess, Safari 1.0, Venn.
#M26: GRAPHICS DISK NO. 3. 3D Sketch, AniRama, Bin/Graphics, Brownian Motion, Control, Fractal Contours, Fractals, Icon Collector, Julia, MakePaint, Melting Clock, Small View, ShapeArt, StarFlight, Window Demo.
#M27: UTILITY DISK NO. 3. Browse/Shazam!, Clocks: analog & digital, Edit, FEdit 3.0, launch, lazymenu, Magic Beep 1.0, Menu Editor, microFinder, Quick Dir, Quick Print, RamStart 2.0+, Road Atlas, ShrinkToFit, SicnEdit, SortMenu, SortMenu Code, SuperFinder 4.0, TabsOut, Unpit, WayStation.
#M28: RED RYDER 7.0. Red Ryder 7.0, Red's 7.0 Stuff, RR7.0 Macros, RR Docs.
#M29: PCS PLAYER NO. 2. Pinball Construction Set Player plus Games: Circus Circus, D &D , Diadora, Max, Merlin, Modern Mistress, Queston, The Royal Pain, Twilight Zone, Whazit.
#30: GAMES #8: Bowl-A-Rama, MacTrek 1.1, Mystery Box 1.0, Shots, Star Trek Trivia Quiz, Window Blaster 1.0.
#31: BLACK WIZARD. Graphic adventure game by Richard Loggins.
#32: FONT DISK NO. 4. Canberra, Chicago, Humanistic, Music, New Dali, Palencia Application, Palo Alto, Pioneer Shadow plus F/DA sorter and Font Tester.
#33: CLIP ART NO. 1. AirCraft, Business, Car Logos, Cars & Trucks, Clip Art Demo, Disney, Eyeballs, Flowers, Misc, Seasons, Trees1, Trees2, ViewPaint 1.5.
#34: GAME DISK NO. 9. 1000 Miles, Asteroids, Cairo ShootOut!, Donkey Doo, Duck Hunt, Pente 1.0.
#35: FONT DISK NO. 5. Beehive 24, Beverly Hills, Boise 18, Chicago 9, Courier, DeStijl, Ham, Happy Canyon, Helvitica, Mod. Chicago, Old English, Square Serrif, Sri Lanka, Worksheet.
#M36: CASTLE OF ERT. A shareware graphic adventure game by B. Fisher.
#M37: MAC-A-MUG PRO DEMO. Version 1.0, Use Mac-A-Mug to create your own mug shots by combining a wide variety of different facial features. Great fun!

CN PC Library

The disks listed below are PD and shareware products for the IBM PC and PC-compatible market. You will need a double-sided drive to read these disks even though they only are formatted for 360K.

#P01: PROCOMM, v2.3 Excellent shareware terminal emulation program; and MINIHOST, a host BBS system.
#P02: PC-STOCK, general purpose stock trend analysis program, and **Cardex**, index card file.
#P03: QEDIT, the Quick Editor. A fast text editor, uses all available memory, multiple file editing, split screens.
#P04: PC-OUTLINE, V.1.05. An outlining and planning program.
#P05: AS EASY AS, a powerful spreadsheet (1,024 rows by 256 cols) with a large set of menu command features.
#P06: PC-DBMS, Verson 1.2, data base program; **Flow Chart Utility**, create your own org.l flow charts; and **Mortgage Calculator**.
#P07: EASY BASE, easy to use data base for medium size data base applications and **Home Bank Book**, bank-book style system.
#P08: TIME SAVER calendar and appointment book; and **PFM**, Personal File Management System, for use with DOS.
#P09: DRAW POKER V1.0 simulates the Nevada video draw poker machine, and **MS-TREK 1.0**, one of the best Star Trek adventure games.
#P10: ZIP: The Ultimate Utility, (c) 1985, 1986 by Edward Dong. Complete file manipulation utilities including ARC and deARC and ascii terminal with xmodem.
#P11: A.D.A. PROLOG. Ver. 1.90. Complete Prolog language with docs.
#P12: FREE WORD. Ver 1.0. PC word processor with docs, demo, and reference.
#P13: VISIBLE PASCAL. Pascal learning system, language, editor, docs.

All Current Notes Library Disks, ST, Magic, and PC are priced at $4.00 each. Add $1 for every 6 disks for shipping and handling. Order from Current Notes Library, 122 N. Johnson Rd, Sterling, VA 22170.

CHRISTMAS SPECIAL!

Order any 10 CN disks for $35.
1st 100 orders receive a free plastic disk case.

Order any 30 CN disks for $100.
1st 12 orders receive a free 30-disk case.

Orders must be postmarked before Dec. 25.
Add $2 S&H for 10 disks, $5 S&H for 30 disks.

Order from Current Notes Library, 122 N. Johnson Rd., Sterling, VA 22170. $4/disk plus $1/(6 disks) for shipping.

WAACE CLUBS

NORTHERN VIRGINIA ATARI USERS' GROUP (NOVATARI)

President.....	G. Weatherhead.	(703) 938-4829
VP-ST.....	David Galvin...	(703) 820-9543
VP-8-bit.....	Gary Purinton..	(703) 476-8391
Treasurer.....	Curt Sandler...	(703) 734-9533
Secretary.....	Bob Zimmon.....	(703) 476-5924
Membership.....	Earl Lilley....	(703) 281-9017
Program Chairs		
8-bit.....	Al Friedman....	(703) 425-0575
ST.....	Ian Charters...	(703) 845-7576
Training Coord..	Glenn Bernstein	(703) 455-6053
Telecom SIG...	Ted Bell.....	(703) 455-5312
	Ed Seward.....	(703) 573-3044
MS DOS SIG....	Mike Gibbons...	(703) 440-0379
SYSOP.....	Ted Bell.....	(703) 455-5312
Disk Libraries		
8-bit.....	Roy Brooks.....	(703) 750-0146
Mail.....	Al Friedman....	(703) 425-0575
ST.....	Bob Bell.....	(301) 593-0889
Bulletin Boards		
8-bit.....	ARMUDIC.....	(703) 569-8305
ST.....	WAACE ST.....	(703) 280-9072
HOTLINE.....	Andrea Bonham..	(703) 534-3503

NEW MEMBERS: Dues are $20/year which includes a subscription to CURRENT NOTES. Join at the main meeting, chapter meeting or by sending $20, payable to NOVATARI, to Earl Lilley, 821 Ninovan Road SE, Vienna, VA 22180.

NOVATARI MAIN MEETING is at the Washington Gas Light Building, 6801 Industrial Road, Springfield, VA. Take 495 to east on Braddock Rd (620) to south on Backlick Rd (617). Left on Industrial Rd. Washington Gas Light is the 2nd building on right.

5:30 TELECOM SIG
6:15 DOOR PRIZES, announcements, OPEN FORUM
6:45 VAST and 8BIT SIG Meetings

Mt. Vernon / Hybla Valley, 1st Thursday, 7:30. Contact Ron Peters at 780-0963.

Sterling, Sterling Library, 7:30-9:30, 1st Wed. Contact Wayne Wilt 437-6159.

PRESIDENT'S REPORT. THANK YOU and YOU and YOU. The 28 chairmen, who worked for nine months before the 'Fest, the 17 new members, who signed up to do the dirty work, the workers, who helped in the demo rooms, the regulars, who always come through when others don't show, the many, who chipped in at the last minute. I THANK YOU.

I have been active all my life in volunteer work of many sorts, church, PTA, scouts, politics, Y, March of Dimes, Asthma Research, but never have I had as many enthusiastic volunteers as in Novatari. I am proud to be a part of you. We will be evaluating this years 'Fest to decide whether we again want two days of 'Fest, a banquet, seminars, display rooms. It does take an awesome amount of volunteer work. Is it all worth it? Are there parts to drop? Should different directions be taken? LET ME KNOW WHAT YOU THINK by letter, phone, or BBS. It is time to start on ATARIFEST '88, our fourth.

New Officers. It is also time to nominate new leadership for Novatari. The three big SIGS - 8BIT, VAST, TELECOM - need to come up with their leaders for '88 at the November meeting. May I suggest it is easier to get main leaders if you volunteer to fill the other jobs first, like Program chairman, Atarifest displayroom chairman, reporter? Make it easy for someone to assume leadership.

New Meeting Times. Note the new arrangement for the main meetings. Program chairmen will plan only for their SIG. The ST group, especially, wanted more time in bulk to cover the many phases that interest their members.

Hotline. Members come and members go more frequently in this area than most. The HOTLINE is a list of members who have volunteered to help fellow members with various aspects of using their computers. We would like to publish the hotline again next month. If there are some pieces of software or hardware that you use a lot and feel comfortable with, call Andrea Bonham (703) 534-3503 to have your name added to the list. Alternatively, if you would like your name REMOVED from the list, be sure to give Andrea a call as soon as possible.

ATARI USERS REGIONAL ASSOCIATION (AURA)

President.....	John Barnes.....	301-652-0667
Vice President...	Barry Marcus....	301-926-3660
Treasurer.....	Mo Sherman.....	301-593-1076
Membership Chmn..	Richard Stoll...	301-946-8435
Educ. Liaison....	Bill Schadt.....	301-622-1547
Disk Libr.(XL/XE)	Bill Frye.....	301-345-4336
Disk Libr.(ST)...	Jeff Kellogg....	
Public Relations.	Richard Stoll...	301-946-8435
Used Equip Sales.	Lincoln Hallen..	301-460-5060

Meetings. 1st Thursday. 7:00 pm (library sales). 7:30-9:00 pm (Program) in the Temple Israel Social Hall. Temple Israel is located in Silver Spring, MD at 420 E. University Blvd. between Colesville Rd (Rt 29) and Piney Branch Rd (Md Rt 320).

Correspondence. All correspondence, including membership renewals, changes of address, etc. should be sent to: AURA, P.O. Box 7761, Silver Spring, MD, 20904. AURA cannot guarantee CURRENT NOTES subscription fulfillment unless the member provides written confirmation of address changes, renewals, etc. to the address given above.

NATIONAL CAPITAL ATARI USERS' GROUP (NCAUG)

President.....	Peter Kilcullen..	202-296-5700
Vice President.	Mike Pollak.....	703-768-7669
Treasurer.....	Allen H. Lerman..	703-460-0289
XL/XE Librarian	Mike Pollak.....	703-768-7669
ST Librarian...	Enrique Seale....	202-295-0112

MEETINGS: 3rd Tuesday, 5:30 - 8:30 pm, room 543, National Science Foundation offices, 1800 G St., NW, Washington, DC. Closest subway stop is Farragut West on the Blue and Orange lines. Building is identified by sign for Madison National Bank on the corner. Front entrance is on west side of 18th between F and G.

NEW MEMBERS: join at meeting or send $20, payable to NCAUG, to Allen Lerman, 14905 Waterway Dr, Rockville, MD 20853. Membership includes CURRENT NOTES subscription.

WOODBRIDGE ATARI COMPUTER USERS' GROUP (WACUG)

President.....	Jack Holtzhauer..	703-670-6475
First VP.....	Arnie Turk.....	703-670-2547
Board Member.....	Bill Parker.....	703-680-3041
Board Member.....	Lou Praino.....	703-221-8193
Board Member.....	Darrell Stiles...	703-494-9819
Treasurer.....	Curtiss Pieritz..	703-494-3704
Secretary.....	Frank Bassett, Jr	703-670-8780
Librarian.....	Charles Stringer.	703-786-8755

MEETINGS: 3rd Tuesday 7-10PM, Community Room, Potomac Branch, Prince William County Library, Opitz Blvd., Woodbridge, VA. Entering Woodbridge from either North or South on Route 1, proceed to the intersection of Route 1 and Opitz Blvd. (opposite Woodbridge Lincoln-Mercury). Turn West on Opitz and take first left turn into the library's parking lot. The Community Room is located to your left immediately upon entering the main building.

NEW MEMBERS: Initial membership fee is $10/yr plus $1 monthly dues. Join at meeting or send check, payable to WACUG, to Frank W. Bassett, 15313 Blacksmith Terr, Woodbridge, VA 22191.

FREDERICK ATARI COMPUTER ENTHUSIASTS (FACE)

President.....	John Maschmeier..	301-271-2470
Vice President...	Mike Kerwin.....	301-845-4477
Treasurer.....	Buddy Smallwood..	301-432-6863
Librarian.....	Jason Harmon.....	301-663-1176
Secretary.....	Bill Mentzer.....	717-762-7281
SYSOP.....	Chuck Grasser....	301-831-9092
Bulletin Board.....		301-865-5569

MEETINGS: 4th Tuesday, 7 - 9:30 pm, Walkersville H. S., MD Route 194, 1 mile north of MD Route 26 (Liberty Rd).

NEW MEMBERS: Dues are $25/year/family. Join at meeting or send check, payable to FACE, to Buddy Smallwood, PO Box 300, Keedysville, MD 21756.

SECRETARY'S REPORT: At our October 27th meeting, Mike Kerwin showed us *Forms Generator*, Dave Karstadt demoed *Seven Cities of Gold*, and Buddy Smallwooed showed us the 16-bit *Maps and Legends*. We also reviewed the happenings of the Atarifest.

At our November 24th meeting, we plan to have Mike Kerwin demo the *First XLent Word Processor* and some 8-bit public domain card games.

SOUTHERN MARYLAND ATARI USERS' GROUP (SMAUG)

President.....	Thomas Crosby....	301-843-1310
Sec/Disk Lib.....	John J. Smith....	301-862-9490
Treasurer.....	Samuel Schrinar..	301-843-7916
Newsletter Ed....	Leroy Olson.....	301-743-2200

MEETINGS: 2nd Thursday, 7:30 pm, John Hanson Middle School in Waldorf, MD. Take MD Route #5, proceed about 1/2 mile East of the intersection of Route 301 and take first left past the Kinney show store to school.

NEW MEMBERS: join at the meeting or send $20 check, payable to SMAUG, to Sam Schrinar, 2032 Alehouse Court, Waldorf, MD 20601.

MARYLAND ATARI COMPUTER CLUB (MACC)

President.....	Jim Hill.....	301-461-7556

MEETINGS: MACC meets on the last Tuesday of every month at 6:30 pm at the Pikesville, MD library. Take Baltimore Beltway exit 20 east (Reisterstown Rd) 1 mile. Pikesville Library on the left next to Maryland State Police Barracks. Feel free to call for info on the club's monthly 8-bit and ST demos.

NEW MEMBERS: Join at the meeting or contact Jim Hill. Membership fee is $20/year pro-rated from June to end of year.

CN Registered Clubs

Members of registered clubs receive CN at a discount rate ($17 instead of $20/year). To become a registered club, your club should send in an initial subscription list of 10 percent of the membership or six members whichever is less. For more information, contact Joe Waters, 122 N. Johnson Rd., Sterling, VA 22170. (703) 450-4761.

ABE'S ACES. Allentown Bethelehem Easton's ACE, PO Box 2830, Lehigh Valley, PA 18001. BBS 215-759-2683.
ACORN. Atari Computer Owners of Rochester, Kathy Scoville, PO Box 23676, Rochester, NY 14692. 334-5820.
AEL. Atari Exchange of Louisville, Don Garr, PO Box 34183, Louisville, KY 40232.
CAUG. Charlotte Atari Users Group, Joe Venturelli, PO Box 240313, Charlotte, NC 28224 704-366-4320.
CIAUG. Central Illinois Atari Users Group, Robert Handley, 1920 East Croxton Ave, Bloomington, IL 61701-5702 309-828-4661.
FLAG. Fort Leavenworth Atari Group, John Hutchinson, PO Box 3233, Ft. Leavenworth, KS 66027, 913-651-5631.
GRASP. Greater Richmond Atari Support Program, Tom Marvin, 1420 Yale Ave, Richmond, VA 23224, 804-233-6155.
HAUG. Huntsville Atari Users Group, Levin Soule, 3911 W. Crestview, Huntsville, AL 35816. 205-534-1815.
LRAA. Little Rock Atari Addicts, Keith Steensma, 28 John Hancock Circle, Jacksonville, AR 72076. 501-985-2131.
MAG. Midwest Atari Group (Iowa Chapter), Gordie Meyer, PO Box 1982, Ames, IA 50010. 515-232-1252.
NAUG. Nameless Atari Users Group, Dana O'Hara, 3475 Manassas Ct, Davidsonville, MD 21035. 301-798-0566.
PACUS. Packerland Atari Computer Users Society, Randy McSorley, 339 S. Maple St, Kimberly, WI 54136. 414-788-1058.
PTAUG. Piedmont Triad Atari Users Group, Hardy Hall, Rt. 9, Box 274C, Reidsville, NC 27320.
RACUG. Rockland Atari Computer Users Group, Richard Bloch, 29 Riverglen Dr, Thiells, NY 10984. 914-429-5283.
SPACE. Southcentral PA Atari Computer Enthusiasts, H. Richard Basso Jr, PO Box 11446, Harrisburg, PA 17108-1446 717-761-3755.
STATUS. Southside Tidewater Atari Technical Users Society, Buck Maddrey, 5245 Shenstone Circle, Virginia Beach, VA 23455. 804-464-2100.
TCC. Triangle Computer Club, Donald Nelson, Rt 3, Box 760, Hillsborough, NC 27278. 919-942-2764.
WACO. Warrensburg Atari Computer Owners, PO Box 199, Warrensburg, MO 64093. 816-747-2543.
WACE. Wichita Atari Computer Enthusiasts, Marilyn Merica, 1722 N. Murray, Wichita, KS 67212. 316-722-1078.

List of Advertisers

Classified Ads	67
Adv Tech Networks 301-937-3605	31
Amgem, Inc. 301-762-8870	58
Applied Comp. Assoc. 800-428-2747	13
Avant-Garde Systems 904-221-2904	41
Beckemeyer Dev. Tools 415-658-5318	50
Berkeley Microsystems 415-530-3436	43
CACI Graphics Serv 703-876-2231	51
Cal Com Inc., 301-933-3074	59
Computer Service Land, 703-631-4949	35
Computer Success, 401-751-0038	47
Current Notes ST Library	68-71
D & P Computer, 216-926-3842	50
Diskcovery, 703-536-5040	36
Electronic Clinic, 301-656-7983	59
ICD, Inc. 815-968-2228	2
Imagists Group	27
Grafikon, Ltd, 301-937-3394	63
L & Y Electronics, 703-643-1729	9
Logical Design Works, 408-435-1445	5
Migraph, Inc. 800-223-3729	15,35
Morgan Comm. Prod. 301-983-0925	37
Novatari XL/XE Library	23
Patnor Enterprises, 800-862-2945	63
Proco Products, 401-568-8459	53
Terrific Peripherals, 617-232-2317	66
Word Perfect Corp, 801-225-5000	76
XLent Software, 703-644-8881	19

Current Notes Subscription Form

Save 33% off the cover price by subscribing!

Enter my subscription to *Current Notes* for *: 1 YEAR ($20.00) _____ 2 YEARS ($36.00) _____

Please Print Clearly

NAME: _____ PHONE: (_____) _____

STREET: _____

CITY: _____ STATE: _____ ZIP: _____

Signature: _____ DATE: _____

Mail check, payable to *Current Notes*, to CN Subscription, 122 N. Johnson Rd, Sterling, VA 22170.

* Current Notes annual subscription rate is $20 ($36 for 2 years). Foreign subscriptions are $30/year for surface rate mail. Foreign AIR MAIL rates: Canada and Mexico: $35; Central America, Caribbean: $40; South America, Europe, North Africa: $50; Middle East, Africa, Asia, and Australia: $60. All foreign subscriptions are payable in US dollars drawn on a US bank.

THAT WHICH IS WELL DESIGNED IS WORTH WAITING FOR.

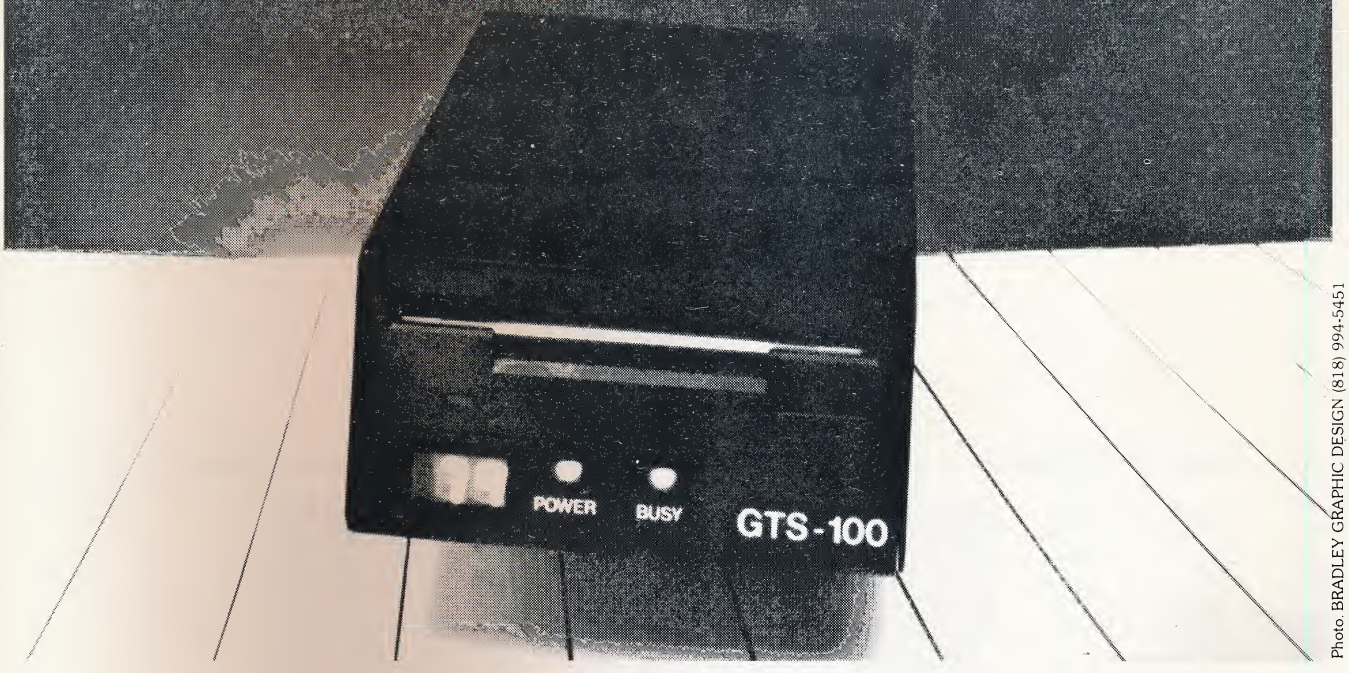


Photo. BRADLEY GRAPHIC DESIGN (818) 994-5451

NOTHING DRIVES AN ATARI ST LIKE A GTS-100

• The GTS-100 is designed for compactness, reliability and improved performance.

• The front panel displays, track read-outs. Optimizing your concentration. Eliminating doubt and second guessing.

• The *Busy* LED tells you that your Atari ST and the GTS are trying to read or write information on your diskette.

• Built-in, low friction metal band GTS *cruise control* head positioning assures trouble-free performance.

• The auto shutter opens upon insertion of the diskette and closes when it is removed, protecting the disk drive and media from external contamination.

• The GTS is a dual sided, double density floppy disk drive with a 720K formatted storage capacity.

• The GTS is sleek and perfectly proportioned. Eye catching. Distinctively European Gran styled.

• You'll love the way it parks next to your Atari.

Easily. Comfortably. Handsomely.

Future Systems, Inc.
21634 Lassen Street
Chatsworth, Calif. 91311
Tel: (818) 407-1647

The drive will be well worth it.

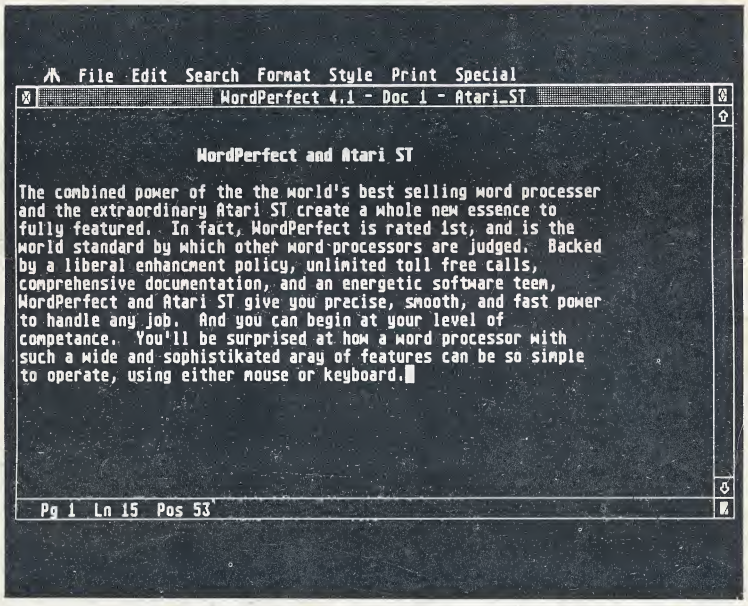
The incredible 3½ GTS-100 Disk Drive.

QUIET COMPACT RELIABLE

WordPerfect Word Processing and ATARI ST

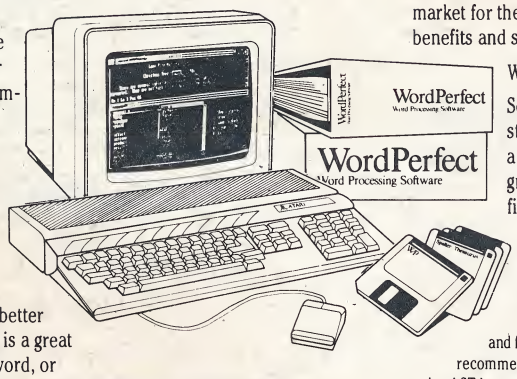
Write Right

If you don't know what's wrong here, WordPerfect does. Or if you do know and just don't want to bother with making the corrections or changes, WordPerfect will. In fact, WordPerfect is designed to help you write better and puts the time saving accuracy and advice you need right where it belongs – at your fingertips and on the screen of your Atari ST.



Right Spelling

Go ahead and create your document. Get the ideas out and on the screen where you can look at them, change them around and organize them exactly the way you want. Then call up WordPerfect's Speller with its 115,000 word dictionary, or the custom dictionary you've already created. Highlight the word you're not sure of and the Speller checks it. If it's wrong WordPerfect gives you a selection of correctly spelled words. Pick the right word and WordPerfect corrects it in the text instantly. The Speller will even look up a word with phonetic spelling. You can check a single word, a paragraph, a page or every word in the entire document quickly, efficiently and accurately. The Spelling feature also looks for double words, words with numbers, and gives you a word count. Of course, words can be added or deleted within your main and custom dictionaries as needed.



Right Word

How many times have you asked yourself if there isn't a better word. A traditional thesaurus is a great help in finding just the right word, or leading you into creating a better phrase, but it's time consuming and tedious. That's why many of us compromise and take what's already there.

Enter WordPerfect's Thesaurus. Just position the cursor on the word you're struggling with within the text on your Atari's screen, then call up the Thesaurus. Both synonyms and antonyms are displayed for your convenient scrolling. And you can do it for two different words at the same time! You can also type in a word from the keyboard. If you still aren't satisfied with the choices displayed, more levels of alternatives are only a mouse click or keystroke away. You can go from synonym, to synonym, to synonym until you find just the right word.

Right Interface

WordPerfect for the Atari ST allows you the option of running from either keyboard or mouse. You can access all features with superb pull down menus and mouse selection or by equally superb, more conventional menu driven keyboard commands. Combine them any way you want. Either interface is fully supported – you do what is most comfortable for you.

Right Choice

Obviously there are less expensive word processing programs on the market for the Atari ST, but none give you the total combination of features, benefits and support that the WordPerfect system does.

WordPerfect is not copy protected.

Sooner or later you'll want WordPerfect so you might as well start saving time and money now. Don't take a chance on a word processor that won't keep up with your growth or the growth of your business. Buy the best word processor in the first place – WORDPERFECT.

For more information, call us during normal business hours at 1-801-225-5000 or write WordPerfect Corporation, 228 West Center Street, Orem, Utah 84057

The Atari ST version of WordPerfect operates on the Atari 520 ST, 1040 ST and forthcoming Mega ST's. One drive required. (Two drives or hard disk recommended.)

Atari ST is a trademark of Atari Corporation

WordPerfect
CORPORATION

THAT WHICH IS WELL DESIGNED IS WORTH WAITING FOR.

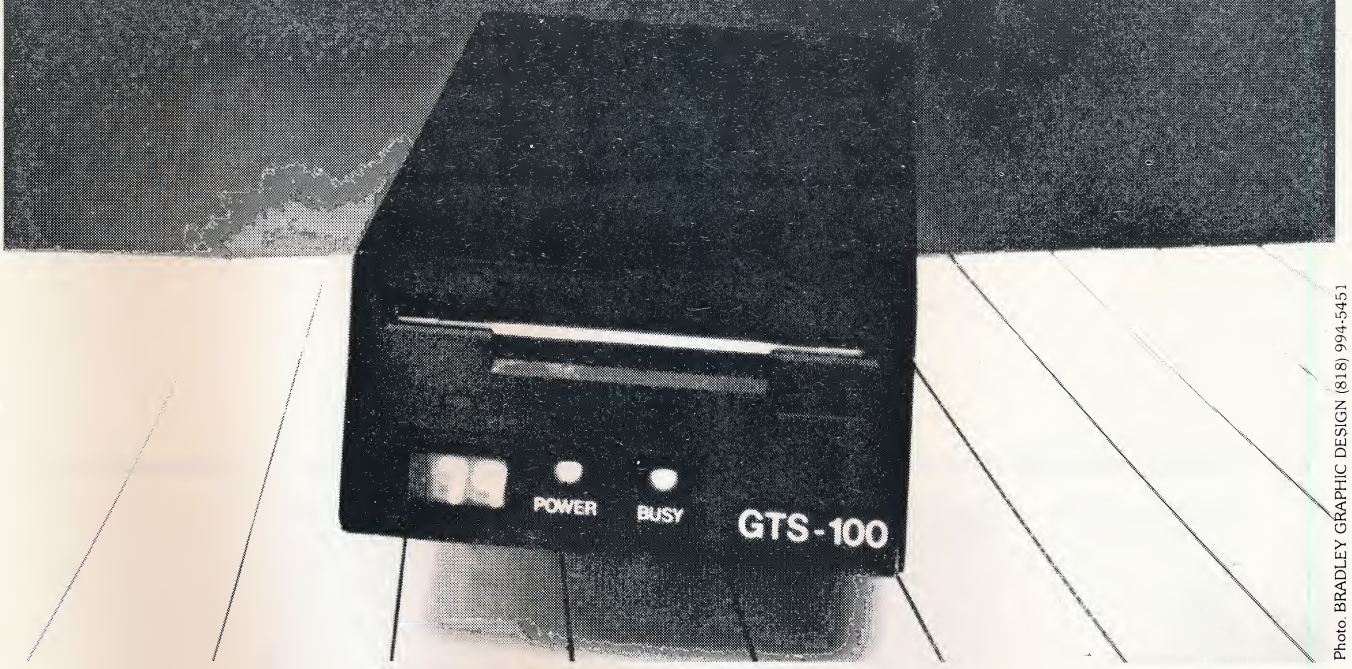


Photo. BRADLEY GRAPHIC DESIGN (818) 994-5451

NOTHING DRIVES AN ATARI ST LIKE A GTS-100

• The GTS-100 is designed for compactness, reliability and improved performance.

• The front panel displays, track read-outs. Optimizing your concentration. Eliminating doubt and second guessing.

• The *Busy* LED tells you that your Atari ST and the GTS are trying to read or write information on your diskette.

• Built-in, low friction metal band GTS *cruise control* head positioning assures trouble-free performance.

• The auto shutter opens upon insertion of the diskette and closes when it is removed, protecting the disk drive and media from external contamination.

• The GTS is a dual sided, double density floppy disk drive with a 720K formatted storage capacity.

• The GTS is sleek and perfectly proportioned. Eye catching. Distinctively European Gran styled.

• You'll love the way it parks next to your Atari.

Easily. Comfortably. Handsomely.

Future Systems, Inc.
21634 Lassen Street
Chatsworth, Calif. 91311
Tel: (818) 407-1647

The drive will be well worth it.

The incredible 3½ GTS-100 Disk Drive.

QUIET COMPACT RELIABLE